

# PSYCHOLOGICAL ABSTRACTS

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# PSYCHOLOGICAL ABSTRACTS

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## GENERAL

3437. Baldwin, F. M. A simplified digital sphygmograph. *Science*, 1929, 69, 477-478.—A piece of apparatus is described by means of which pulse tracings may be taken without the difficulties of adjustment inherent in the older methods.—G. J. Rich (Bellevue Hospital).

3438. Bunch, C. C. Auditory acuity tests. Comparison of the results made with two types of audiometers. *Arch. otolar.*, 1926, 3, 108-120.—Two types of audiometers have been presented to otologists. In one, known as the pitch range audiometer, the continuous range of tones from 30 to 7,070 d. v. is produced in a telephone receiver by means of a variable speed motor-driven generator. In the second, known as the No. 1A audiometer of the Western Electric Co., the octaves and semi-octaves of C, 22 tones in all, are produced in the receiver by means of a vacuum tube oscillator with appropriate inductances, capacities, and filters. A series of pathological cases was tested with both types of audiometers to determine the relative amount of information contained in the 2 types of records. In general, the findings were quite consistent. Since the No. 1A tests only a few tones, dips and gaps shown by the pitch range audiometer were not always shown in the records from the former instrument. Due to the fact that the tones from the No. 1A are louder than those from the pitch range audiometer, some complete gaps are shown to be simply depressions in the range. Responses to the loud tones from the No. 1A were given when all loud tones which could be produced in the laboratory were inaudible.—C. C. Bunch (Courtesy *Biological Abstracts*).

3439. Chou, S. K. A quadrant tachistoscope for studying the legibility of Chinese characters. *J. Exper. Psychol.*, 1929, 12, 178-186.—Wiring details and photographic reproductions of a quadrant tachistoscope, magnetically operated, are presented together with a description of the general features of similar instruments and a bibliography of 21 titles pertaining to similar types of apparatus.—S. Renshaw (Ohio State).

3440. Davis, R. C. A vacuum tube for stabilizing the current during measurements of the galvanic reflex. *Amer. J. Psychol.*, 1929, 41, 474-475.—Description of a vacuum tube resistance in series with S, which is intended to keep the current constant during large and small resistance variations and allow the changes in voltage drop to be measured.—D. E. Johannsen (Wellesley).

3441. Dimmick, F. L. A further modification of the Sanford chronoscope. *Amer. J. Psychol.*, 1929,

41, 475-476.—Description of a modified Sanford chronoscope which eliminates the variability in the length of the pendulum threads, which necessitated frequent readjustments in the original instrument.—D. E. Johannsen (Wellesley).

3442. Dresden, A. Mathematical certainty. *Scientia*, 1929, 45, 369-376.—Mathematics does not have "an objective validity external to other intellectual activities, but one which is based on the inherence of the fundamental bases of mathematics in all thinking." These bases are the intuitions "of rest-motion, of discrete-continuous, of unity-diversity." It is questionable whether mathematics should be depended upon in "those disciplines in which the living organism enters as an essential element."—R. G. Sherwood (Stillwater, Minn.).

3443. Enriques, F. The historic development of logic; the principles and structure of science in the conception of mathematical thinkers. (Trans. by J. Rosenthal.) New York: Holt, 1929. Pp. 282. \$3.00.—R. R. Willoughby (Clark).

3444. Ewen, J. H. Aids to psychology. New York: Wood, 1929. Pp. vii + 166.—An attempt has been made to state the main facts of psychology in a brief and concise form for the use of students who do not find time to specialize in this subject. Among the subjects discussed are the following: body and mind, data and methods of psychology, instinct, habit, language, imitation, memory, emotion, sleep, dreams, etc.—P. H. Ewert (Vermont).

3445. Fearing, F. Jan Swammerdam: a study in the history of comparative and physiological psychology of the 17th century. *Amer. J. Psychol.*, 1929, 41, 442-455.—A brief biographical sketch of Swammerdam is followed by a summary of his important contributions to nerve-muscle physiology, voluntary action, instinct and the experimental method. His notable contributions include an experimental disproof of the animal spirits hypothesis, the introduction of a quantitative and graphic method for the study of the response of the excised nerve-muscle preparation, proof that there is no increase in the bulk of a muscle during contraction, and a suggestion of the nervous arc concept.—D. E. Johannsen (Wellesley).

3446. Fräsdorf, W. Die psychologischen Anschauungen J. J. Rousseaus und ihr Zusammenhang mit der Französischen und Englischen Psychologie des XVI-XVIII Jahrhunderts. (J. J. Rousseau's psychological point of view and its connection with French and English psychology of the 16th to 18th centuries.) Langensalza: Beyer, 1929. Pp. 248.—By means of the entire available writings of Rous-

seau—including letters, fragments, notes, etc.—this book attempts to build up a total picture of Rousseau's psychological outlook. In this way it clarifies important terminological questions and explains in detailed chapters the close connection of Rousseau's psychological convictions (especially of his principal thesis of the primacy of feeling) with his religious, ethical and esthetic beliefs. The book deals with the question of originality or the source of the individual elements of his thought-world. The index of the book has 318 items. Without underestimating the decisive importance of his own personality for Rousseau's world view, a number of interesting ideas connect him with the most diverse French and English philosophers. For this reason the author had to consider briefly almost the entire English and French psychology from the 16th to 18th centuries. The end of the book deals with the close connections of Rousseau's psychological viewpoints with his general world view, with his personality, and with the major philosophical currents of his time. It also considers the importance of Rousseau's points of view for the further development of psychology.—*W. Frässdorf* (Bremen).

3447. **Hammer, B.** *Nya psykologi-läroböcker.* (New psychological textbooks.) *Ark. f. Psykol. o. Ped.*, 1929, 8, 101-103.—Brief mention and discussion of the textbooks of Frobes, Dumas, and others, with special emphasis upon recent Scandinavian textbooks.—*M. L. Reymert* (Wittenberg).

3448. **Hausherr, H.** *Plato's conception of the future as opposed to Spengler's.* *Monist*, 1929, 39, 204-224.—The author analyzes Plato's and Spengler's respective conceptions of the future and refutes the former's charge that the Greeks lacked a conception of the future. For Spengler, the future is a zoological perspective of consciousness. The nature of the future cannot be apprehended by the cognitive forms of pure reason. It is inwardly lived, experienced and intuited. Time is an inner direction, distance, farness. Its implied futurity is identical with direction. The future is an organic, dynamic experience. Spengler denies to the Greeks a conception of the future on the grounds that (1) the Greeks possessed no historical memory, (2) they transmitted all their experiences into a timeless immutable background, (3) they localized time to a definite place and instant and possessed no extension of time into space, (4) they did not conceive the world as continuous, but complete, (5) the Greek's soul is restful, that of the modern western world is characterized by unrest and longing. In opposition to this, Hausherr urges that Plato at least had not only a general notion of the future, but assigned diverse meanings to the concept. He lists and discusses the various meanings as follows: (1) as an unspecified mode of time, (2) as a mode of technical improvement, (3) as a mode of organic evolution, (4) as a mode of physical chronology, (5) as a mode of physical growth, (6) as a mode of moral evolution, (7) as a mode of intellectual development, (8) as a mode of political progress. Not only Plato but Heraclitus had a pronounced sense of time, the lat-

ter indeed vying with Bergson and Whitehead. The author concludes that Spengler's own views are a direct modern extension of the Heraclitean and, in part, of the Platonic conception of time.—*C. M. Diserens* (Cincinnati).

3449. **Hulin, W. S.** *A simplified electromagnetic aesthesiometer.* *Amer. J. Psychol.*, 1929, 41, 476-477.—Description of an electrically driven esthesiometer, so constructed as to eliminate the vibration and jar usually occurring with such instruments. The stimulus point falls by gravity, thereby allowing a more accurate measurement of the intensity of the stimulation than measurement of the strength of the electric current permits.—*D. E. Johanneen* (Wellesley).

3450. **Hunter, W. S., & Willoughby, R. R.** [Eds.] *Psychological index.* (No. 35). Princeton: Psychological Review Co., 1928. Pp. 389. \$2.00.—Bibliography of psychological literature for 1928; 5,487 titles. The Russian literature is again represented by about 400 titles. The percentage distributions of the titles among the main sections for Nos. 32-35 are as follows:

Sec.	I	II	III	IV	V	VI	VII	VIII	IX	X	XI
32 ...	10	4	11	2	9	2	17	7	17	17	4
33 ...	10	4	9	1	9	2	18	8	14	21	4
34 ...	10	5	8.5	1	8	3	16	9.5	16	19	4
35 ...	10	2	8	2	6	3	18	10	14	21	6

I = general; II = nervous system; III = sensation and perception; IV = feeling and emotion; V = motor phenomena; VI = attention, memory and thought; VII = social functions of the individual; VIII = special mental conditions; IX = nervous and mental disorders; X = mental development in man; XI = plant and animal behavior.—*R. R. Willoughby* (Clark).

3451. **Kelley, T. L.** *Scientific method.* Columbus: Ohio State Univ. Press, 1929. Pp. 190.—This volume contains 5 lectures, delivered at Ohio State University and bearing the following titles: (1) interrelationship between method of research and field of investigation; (2) the rôle of judgment in "objective measurement"; (3) in what units shall we measure intelligence and achievement? (4) the bearing of recent scientific development upon problems of education and inheritance; (5) mental traits of men of science. The first lecture outlines four methods of research—the historical method, the experimental method, the method of forecasting the future, and the logical method. The second lecture is a discussion of the questionnaire technique. The book is quite non-technical, but lecture 3 has 2 brief mathematical appendices.—*M. N. Crook* (Clark).

3452. **Kellogg, W. N.** *The graphic method in psychophysics.* *Amer. J. Psychol.*, 1929, 41, 456-459.—A method of taking psychophysical records on a smoked kymograph drum is reported. By means of this technique records taken by the method of average error, the method of minimal change, and the method of constant stimuli can be taken. This graphic method has several advantages, not the least

of which is that it is more objective, permitting E to devote his entire time to the apparatus, and then check over the records at leisure.—*D. E. Johannsen* (Wellesley).

3453. **Keyserling, H. A.** *Creative understanding*. New York: Harper, 1929. Pp. 524. \$5.00.—*R. R. Willoughby* (Clark).

3454. **Keyserling, H. A.** *The recovery of truth*. (Trans. by Paul Fohr.) New York: Harper, 1929. Pp. 658. \$5.00.—*W. S. Hunter* (Clark).

3455. **Klemm, O.** *Bibliographie. Arch. f. d. ges. Psychol.*, 1929, 68, 395-514.—A bibliography of non-German literature for the year 1927 on psychology and related subjects, compiled by Klemm with the assistance of W. S. Hunter and others. 2,599 titles classified in 11 main divisions with many subdivisions.—*M. B. Mitchell* (Boston State Hospital).

3456. **Lehman, H. C., & Witty, P. A.** *The lure of absolute objectivity. Amer. J. Psychol.*, 1929, 41, 492-498.—Critique of the inconsistency of the behavioristic rejection of consciousness. The article points out the failure of the physical and biological sciences to attain the goal set them (by Watson) of perfect objectivity.—*D. E. Johannsen* (Wellesley).

3457. **Lenz, J.** *Die Krise der Psychologie als Krise der Kultur*. (The psychological crisis as a cultural crisis.) *Pastor bonus*, 1929, 40, 82-101.—*A. Römer* (Leipzig).

3458. **Linke, P. F.** *Grundfrage der Wahrnehmungslehre*. (Basic problems in the theory of perception.) (2d ed., rev.) Munich: Reinhardt, 1929. Pp. xxvi + 430. M. 13.—The central problem of the book is *Gestalt* perception. It seeks, independently of the school of so called "*Gestalt* theorists" (Wertheimer, Köhler and others), but in definite polemical statements, to give the *Gestalt* theory a new basis. In sharpest contrast to the dominant theory it thus comes to the conclusion that the *Gestalten* are above all the primary and alone the real, while the images without *Gestalt* (sums, associations, etc.) appear as pure mental formations. Thus the problem does not lie in the "configuration" (*Gestaltung*) but in the loss of *Gestalt* through abstraction (*Entstaltung*), etc., and in the alteration of *Gestalt* (*Umgestaltung*). The author proves his thesis by the facts in the actual situation which is usually characterized as the *Gestalt* experience, and through careful analysis based on his theory of independence of strata he shows a clearer and more definite idea of the conceptual experience than has existed heretofore. It is a mistake to attribute perceptions and ideas to experience. Thus, for example, the red of sensation and even the red of phantasy do not belong (as content or material) to experience and consciousness. It is psychically conditioned, but not itself psychic, it belongs to the external, without thereby being real. Outside that of the physical and the psychic a third stratum of the objective unreal (*Frege*) must be recognized. Since this assertion can be successfully maintained only by a careful analysis of the categories "real," "physical," "psychical," etc., the book develops

into a general categorical theory of psychology and thus into a kind of philosophical groundwork for psychology. A comprehensive summary at the end and a complete index serve for convenient reference. The new edition has an appendix containing a series of polemical statements, first in regard to Husserl's experimental phenomenology, against which the author sets his own method as objective phenomenology, then with Driesch and Schlick's theory of the unperceived, Köhler's theory of physical *Gestalten*, and Stumpf's differentiation of perception and idea, and closes with supplementary observations on the author's theory of cinematographic vision.—*P. F. Linke* (Jena).

3459. **Manyà, J. B.** *El talent i l'organisme segons la doctrina de Sant Tomàs*. (Talent and the organism according to the doctrine of Saint Thomas Aquinas.) *Criterion*, 1929, 6, 143-157.—The author finds, in the works of Thomas Aquinas, much that is modern today in academic psychology.—*J. W. Nagge* (Harvard).

3460. **McLaughlin, A. R.** *An improved chronograph. Science*, 1929, 69, 332-333.—A revised wiring system (described in detail and figured) converted a pendulum-driven Harvard chronograph from a very unsatisfactory to an approximately satisfactory instrument for a student's laboratory.—*R. R. Willoughby* (Clark).

3461. **Peterson, J.** *The twenty-fourth annual meeting of the Southern Society for Philosophy and Psychology. Amer. J. Psychol.*, 1929, 41, 502-511.—Brief reviews of the papers presented at the meeting of the Southern Society for Philosophy and Psychology, held in Lexington, March 29 and 30, 1929.—*D. E. Johannsen* (Wellesley).

3462. **Römer, A.** *Bibliographie zur Religionspsychologie*. (Bibliography on the psychology of religion.) Leipzig: Verlag des Boersenvereins der Deutschen Buchhändler, 1929.—This is a bibliography which appeared in the theological section of the *Jahresberichte des Literarischen Zentralblattes*, embodying important scientific German works.—*A. Römer* (Leipzig).

3463. **Ruckmick, C. A.** *The fourth annual meeting of the Midwestern Psychological Association. Amer. J. Psychol.*, 1929, 41, 511-515.—A summary of the papers presented during the meetings of the Midwestern Psychological Association at the University of Illinois on May 10 and 11, 1929.—*D. E. Johannsen* (Wellesley).

3464. **Scheidemann, N. V.** *Experiments in general psychology*. Chicago: Chicago Univ. Press, 1929. Pp. viii + 108.—This student's notebook-manual contains a large number of simple experiments in the fields of sensory processes and learning that do not require the use of laboratory apparatus of any kind. "The purpose of this notebook-manual is to give the student opportunity to experience, in a systematic manner, various phases of mental life in order to have concrete experiences serving as nuclei for the study of psychology."—*N. L. Munn* (Clark).

3465. Science Service. The earliest motion pictures. *Scient. Mo.*, 1929, 29, 90-93.—To analyze the movements of a horse Mr. Leland Stanford in 1878-1879 conceived the plan of setting up different cameras properly arranged in space and time of exposure to take a rapid succession of instant photographs. E. J. Maybridge directed the work.—J. F. Dashiell (North Carolina).

3466. Valentine, W. L. A technique in maze and discrimination box construction. *J. Comp. Psychol.*, 1929, 9, 197-201.—A standardized method of maze construction is described, consisting chiefly of the employment of basswood,  $\frac{1}{2} \times 10$  inches, all pieces being cut in lengths in multiples of 6 inches, and holes being bored of a fixed size, equally spaced. The mazes have no floors; thus they are easily reversible and readily cleanable. They need no roof or cover, the sides being 10 inches high. Though costing more than the Warner-Warden type, they are inexpensive, although they may warp. 6 figures.—H. R. Crosland (Oregon).

3467. [Various.] Reports of the Indian Psychological Association and the meeting of the Section of Psychology of the Indian Science Congress, 1928. *Indian J. Psychol.*, 1928, 3, 55-58.—C. W. Bray (Princeton).

3468. Weiss, A. P. A theoretical basis of human behavior. (2d ed., rev.) Columbus: Adams, 1929. Pp. 479.—The revised book shows new material appearing in the sections on the nature of energy, the nature of the human responses, behaviorism and metaphysics, and the language reactions. Weiss has also added new sections on feeling and on meaning. The point of view of the author is little changed from that presented in the first edition of the book, the changes being embodied in the amplification and extension of the treatment of the fields of human behavior. "From the standpoint of the writer, behaviorism is the science that studies the origin and development of those bodily movements (responses) of the individual which establish his status in the social organization of which he is a member." The following quotation appears in a new section, "Pleasantness-unpleasantness are not the causes of action but express only the degree of supplementation and interference between actions which are already in progress. From the standpoint of behavior, pleasantness-unpleasantness are secondary reactions to a ratio which represents the amount of supplementation and interference between nearly simultaneous action." The book attempts to analyze human behavior into biophysical and biosocial stimuli, as well as to catalogue the biophysical and the biosocial responses. The following postulates form a vital part of Weiss' system: (1) human behavior is a form of motion, (2) the individual is the locus in the movement continuum, (3) every movement within the individual is a mathematical function of all past and future motions in the universe. A bibliography of well over 200 titles is appended.—J. W. Nagge (Harvard).

[See also abstracts 3507, 3519.]

# SENSATION AND PERCEPTION

3469. de Gourmont, R. Colours. (Trans. by F. R. Ashfield.) New York: B. G. Guernsey, 1929. Pp. 203. \$5.00.—W. S. Hunter (Clark).

3470. Cowan, A. Relation of the aperture of the eye to ocular function. *Amer. J. Ophth.*, 1926, 9, 191-193.—The effect of the shape and size of a stop aperture on the image when in focus can be demonstrated with a lens system set up on an optical bench. If this simple system is compared with an emmetropic eye it will be seen that good vision does not depend on the size, shape or position of the pupil. The effect of a stop aperture when the image-screen does not lie in the focal plane of the dioptric system, as in ametropia, shows that the vision of patients with irregular or displaced pupils, or opacities in the media, may be lowered out of all proportion to the refractive error.—A. Cowan (Courtesy *Biological Abstracts*).

3471. Ehrenstein, W. Untersuchungen zur Bewegungs- und Gestaltwahrnehmung. Dritte Mitteilung. (Investigations concerning the perception of movement and configuration. Third communication.) *Arch. f. d. ges. Psychol.*, 1928, 66, 155-202.—In the first part of this article the laws of the perception of movement are formulated on the basis of material previously presented by the author and others. Perception of movement belongs to the general class of experiences of relationship to which a special chapter is devoted. The second part contains a report of a number of experiments showing the conditions under which configurations arise out of a background of manifold visual forms. If one of these forms differs from the uniform rest in color, form, size, familiarity, in having long and thin points, or in being picked out by the observer, then it becomes the figure in relation to which the other forms constitute the background. In another series of experiments any two of these configurational factors were presented together with the uniform forms in order to determine which of the two had the stronger tendency towards configuration. In a similar way the origin of groups was investigated. Finally it was shown that all observers have eidetic images under certain conditions. If the visual forms are presented on a moving endless band in such a way that they disappear behind a pasteboard cover, then they are still seen on this cover after a few repetitions.—K. F. Muenzinger (Colorado).

3472. Fletcher, H. Speech and hearing. New York: Van Nostrand, 1929. Pp. xv + 331. \$5.50.—This treatise embodies the major conclusions derived from some fifteen years of research undertaken in the Research Laboratories of the Bell Telephone Company, designed to comprise a comprehensive survey of speech and hearing to obtain fundamental facts on which to base the design of apparatus and systems for telephone use. Part I is concerned with (1) the physiological mechanisms of speech and the artificial means of initiating speech sounds by compounding elemental frequencies of proper intensity and phase, (2) techniques for analyzing character-

istics of speech waves, (3) speech power, and (4) the frequency of occurrence of the different speech sounds. Part II is devoted to analytical and synthetic (experimental and theoretical) physical treatment of music and noise. Part III introduces (1) a few problems involved in the mechanism of hearing, in which the author sketches a theory of his own; (2) the limits of audition (frequency and intensity); (3) minimum perceptible differences in sound (loudness discrimination, in which original and valuable techniques are introduced, and important new laws established); (4) masking effects, which divide themselves logically into four fundamental laws heretofore unrecognized; (5) binaural beats; (6) methods of testing the acuity of hearing. Part IV as well as Part III is largely psychological material, and deals with (1) the loudness of sounds, (2) the recognition of the pitch of music, (3) methods of measuring the recognition of speech sounds, (4) effect of change in the received intensity of speech sounds upon their recognition, (5) effect of frequency distortion upon the recognition of speech sounds, (6) effect of other types of distortion upon the recognition of speech sounds, and (7) effect of noise and deafness upon the recognition of speech sounds.—*W. C. Beasley* (Ohio State).

3473. **Gebhardt, M.** *Beitrag zur Erforschung des absoluten Gehörs im vorschulpflichtigen Kindesalter.* (Contribution to the investigation of absolute hearing in the pre-school child.) *Arch. f. d. ges. Psychol.*, 1929, 68, 273-294.—A report of the hearing and personality development of A. R. to the age of five and one-half years. At two years he could discriminate between one or two instruments, as piano and violin. At three he recognized a new street car by its sound alone. Two months later, when taken to a new city, he remarked spontaneously that a noise from the street was like his toy elephant, although they were never heard together. His mother then taught him the notes on the piano one at a time; he recognized them thereafter with remarkable exactness. At the end of the fourth year, he began to sing. Although he made many mistakes at first, because he had not learned to control the vocal organs, he corrected his errors, showing that his tonal memory was exact. Soon he began to improvise and revise melodies to suit himself. According to the Binet-Simon intelligence test, he was accelerated a year and a half. When five and a half years old, he was given a formal examination in hearing, including recognition and discrimination of tones, intervals and tonal memory; he was found to have very extraordinary ability. His father and mother were both very much interested in music, but the child's ability showed itself long before any formal training was given.—*M. B. Mitchell* (Boston State Hospital).

3474. **Goldmann, P.** *Untersuchungen über das Ablesen vom Munde bei Taubstummen und Spätertaubten.* Investigations concerning lip reading by deaf and dumb persons and those who have become deaf in later life.) *Arch. f. d. ges. Psychol.*, 1929, 67, 441-504.—The purpose of this study was to de-

termine experimentally what factors influence lip reading positively and negatively. The subjects were 20 deaf and dumb children, 14-16 years old, and 4 adults who had lost their hearing between the years 12-17. In the first series of tests 30 nouns were pronounced by the experimenter and the subjects were asked to write them down. The deaf and dumb children averaged 18 correct readings as compared with 15 of the deaf adults. However, when these words were classified and the classes indicated, the averages were 24 and 27 respectively. When 10 simple sentences were offered the percentages of correct readings were 41 and 62 respectively. Furthermore, the deaf adults never reacted with meaningless words in their sentences. When the verb as the chief bearer of the meaning was presented in the infinitive form before the sentences there was an increase in correctness. In the last test two parallel series of sentences were given containing the same verbs, but in more complicated forms in the second series, such as negation, passive and subjunctive, which increased the difficulties considerably. The results show that there are three factors which make for good lip reading: turning to the sense instead of to the words; readiness to turn to higher levels of expression instead of to lower, concrete ones; and the observation of the succession of lip movements. Applications for the teaching of deaf and dumb children are added.—*K. F. Muenzinger* (Colorado).

3475. **Goodman, G. J., & Downey, J. E.** *An image of spectacle rims.* *Amer. J. Psychol.*, 1929, 41, 498-502.—Description of an image of spectacle rims which always appears when the spectacles are off and the illumination is reduced to a minimum; it appeared on one occasion after the glasses had not been worn for 120 hours. Another time it appeared after the eyes had been thoroughly dark-adapted.—*D. E. Johannsen* (Wellesley).

3476. **Gritman, W. B., & Dallenbach, K. M.** *The formula for the intensive gradation of heat.* *Amer. J. Psychol.*, 1929, 41, 460-464.—In order to test the formula proposed by Burnett and Dallenbach for the intensive gradations of heat aroused by warm and cold temperatures, 10 temperature combinations were selected, giving a uniform and regular series of differential values. They were compared by the method of paired comparisons, by three relatively untrained O's; two heat grills, as previously described, were used. Since the rank order of the temperature-combinations correlated very closely with the rank order of the differential values, the authors feel justified in concluding that the formula is adequate (under the conditions used) for the computation of the intensive gradations of heat aroused by warm and cold stimuli.—*D. E. Johannsen* (Wellesley).

3477. **Helson, H.** *The effects of direct stimulation of the blind-spot.* *Amer. J. Psychol.*, 1929, 41, 345-397.—In an effort to bring order out of the chaos into which theories concerning the rôle of the blind-spot have involved the facts, a qualitative experiment was undertaken to settle conclusively the question whether or not its direct stimulation can be perceived. A detailed historical and critical survey,

pointing out the inconsistencies found in the data reported by different investigators, is followed by a description of a lengthy series of qualitative experiments. It is definitely found that stimulation of the blind-spot by light, either white or colored, arouses a sensation, though form perception is poor. If the retinal field is dark the stimulating light need not be very intense in order to be seen. After-images, contrast effects, adaptation, and both real and apparent movement can be observed under suitable conditions. Simultaneous stimulation of two or more parts of the blind-spot or neighboring areas produced dominance, rivalry, or mixture, depending on the qualitative aspects of the various stimuli. Analyzing these data in the light of the various theories which have been suggested as explanatory of vision in the blind-spot, the author shows that the various theories of irradiation, diffusion, etc., are inadequate concepts. Two alternative hypotheses are suggested: (1) end organs in the optic nerve head which are responsible for the phenomena seen; and, (2) direct stimulation of the optic nerve fibers. It is pointed out that although the latter hypothesis fits in with the rapidly growing belief that all protoplasm is affected by light, it may be charged with violating the principle of eccentric projection; hence, the first hypothesis is favored. The point demands histological investigation, however.—*D. E. Johannsen* (Wellesley).

3478. Hillebrand, F. *Lehre von den Gesichtsempfindungen*. (Theories of visual sensation.) Vienna: Springer, 1929. Pp. 205. M. 14.—This complete presentation of the theories of visual sensation, based throughout on experimental studies, is divided into two main parts: sensation of light and sensation of space. In the part on light sensation particular emphasis is placed upon the fact that color sensation is not wholly dependent upon stimulation, but also upon the condition of the visual organ for the time being (phenomena of adaptation and contrast). There is no unequivocal association between the three physical variables, wave length, light intensity and quantity of admixture of colorless light, on the one hand, and the variables of color quality (color tone, brightness and saturation) on the other. In addition the methods and laws of light mixture and different color theories are discussed in detail. In the part on space sensation localization in resting as well as in moving vision is treated. The author is a nativist and thus is of the opinion that our visual organs react to a stimulus just as primarily with a place as with a color. However, the development of the ability to localize, as it is found in children and in congenitally blind persons who have been operated upon, is reconcilable with a primary localization in all three dimensions—the source of our perception of depth lies in single vision with disparate retinal points. The empirical localization motive as well as the arguments of the empiricists against nativism are discussed thoroughly. This work is dominated by the effort, made also by Hering, to fit all theoretical statements to the actual facts of our sensations, not to our judgments of external objects.—*Frau Hillebrand* (Innsbruck).

3479. Lauer, L. *Untersuchungen über die scheinbare Grösse von Körpern*. (Investigation of the apparent size of bodies.) *Arch. f. d. ges. Psychol.*, 1929, 68, 295-324.—The illusions of three-dimensional space corresponding to the Müller-Lyer illusion in the plane are studied. Groups of spherical sectors and segments, and prisms of varying heights whose members have the same volume, are used with adults and children as subjects. The results show conclusively that the shape does affect the apparent size of the object. When comparing a cube and sphere of the same volume there is a pronounced tendency to underestimate the volume of the sphere. There is a marked agreement among the subjects as to the rank-order of the apparent sizes of the equal spherical sectors, spherical segments, and prisms. This depends upon two facts—that certain forms correspond to certain rankings, and that the judgment of the dimensions of an object depends upon contrast effects. There is an extensive agreement between the size ranking of the objects and their characteristic appearance as flat surfaces. Only one subject had good enough eye measurements to avoid a judgment of too great flatness and to succeed in judging all members of the group as equal, thus avoiding the illusion. When the rankings of the adults were contrasted with those of the children, characteristic differences were found. The judgments of the latter were made less critically and more naively.—*M. B. Mitchell* (Boston State Hospital).

3480. Meisenheimer, J. *Experimente im peripheren Sehen von Gestalten. Untersuchungen zur Lehre vom Sehfeld, von der Vorstellungsreproduktion und der Aufmerksamkeit*. (Experiments in indirect vision of forms. Investigations concerning the doctrine of the field of vision, reproduction of perceptions and attention.) *Arch. f. d. ges. Psychol.*, 1929, 67, 1-130.—Three series of experiments in which 22 observers took part were performed with specially constructed perimeters. In the first series stimuli, such as rings, numbers and letters, were presented in a slit at varying distances from the fixation point. The particular stimulus was exposed by the observer himself and attended to as long as necessary to describe his complete experience afterwards. The results are divided into seven classes which show a definite variation of distribution according to the distance between the fixation point and the attention stimulus. Illusions were common. In the second series the observer exposed the perimeter just long enough to form a first definite impression of the stimulus. The times increased steadily with the distances between fixation point and stimuli. In the third series the observer fixated a given point as usual and directed his attention to a square at various distances from the fixation point and the slit. The designs in the slit were then uniformly and poorly observed without regard to the distances between the slit and the fixation point or the square. The introspections of the observers are analyzed minutely. 45 references and 13 tables.—*K. F. Muenzinger* (Colorado).

3481. Miles, W. R. Ocular dominance demonstrated by unconscious sighting. *J. Exper. Psychol.*, 1929, 12, 113-126.—By means of a device known as the V-scope several hundred individuals were asked to sight at a distant object. When photographed from or on the line of sight, the prints show the manifest dominance of one eye over the other. The V-scope is described in detail, and results are given showing that about 65% of the normal population demonstrated dominance of the right eye, about 30% dominance of the left and 5% give mixed or indeterminate results. A bibliography of 21 titles is appended.—S. Renshaw (Ohio State).

3482. Pal, G. The nature of colour experience of a partial colour blind subject. *Indian J. Psychol.*, 1928, 3, 17-32.—Using colored wools and a color wheel, it was found that the subject equated red and blue-green with various greys. Red was occasionally recognized when alone or when mixed with white or yellow. Red, green, yellow and orange could be obtained by mixing yellow with black or white. A list of various colors which are confused with one another is given.—C. W. Bray (Princeton).

3483. Snyder, M. A. An experimental study of four cases of color-blindness. *Amer. J. Psychol.*, 1929, 41, 398-411.—Four color-blind subjects were submitted to a group of standard visual experiments with a view to comparing their results with those of normal subjects. The phases of visual experience studied were: (1) brightness discrimination, (2) brightness contrast, (3) relative brightness of colors, and (4) negative after-images. The results are summarized for each of the four O's separately, since the types of color-blindness shown are quite individual. Three are below the normal in brightness discrimination and brightness contrast, and all have difficulty in obtaining after-images.—D. E. Johannsen (Wellesley).

3484. Triepel, H. Falsche Beurteilung gehörter Töne. (Wrong judgment of heard tones.) *Arch. f. d. ges. Psychol.*, 1928, 66, 497-500.—The author tries to explain the judgment of tones by his father, who had an absolute pitch perception and invariably named a tone struck on a German piano one half note too high. His father had spent some time in Paris and had become fond of, and brought home, a French piano which was tuned lower than German pianos are. Thus his pitch perception became associated with this tuning. Since the difference between the two tunings is not quite half a tone, the author thinks that another factor was contained in the character of the well-tempered tuning.—K. F. Muenzinger (Colorado).

[See also abstracts 3438, 3458, 3479, 3671, 3833.]

#### FEELING AND EMOTION

3485. MacKaye, D. L. Recording emotional qualities. *Psychol. Clin.*, 1929, 17, 234-248.—As part of their regular work in English, 244 school children, 127 girls and 117 boys, wrote a short composition on one of the following topics: *My Favorite Day-dream*, *The Dream That Bothers Me Most*, *The*

*Dream Which I Remember Best*. The papers were then carefully studied for the emotional qualities that might be revealed. Conspicuous sex differences appeared. When the group was divided into high, median, and low divisions, according to ratings on intelligence tests, it appeared that the high and low groups showed definite, though somewhat different, emotional qualities, while the median group seemed to lack emotional quality and imagination. The compositions proved of practical value to the vocational counselor in revealing home influence and in checking the validity of a pupil's vocational interest.—J. T. Metcalf (Vermont).

3486. Young, P. T. The trained observer in affective psychology. *Amer. J. Psychol.*, 1929, 41, 516.—Response to Nafe's note which answered an earlier criticism by Young of Nafe's work. Young holds that the distinction between the type of report and the facts reported cannot be maintained.—D. E. Johannsen (Wellesley).

[See also abstract 3896.]

#### ATTENTION, MEMORY AND THOUGHT

3487. Belanner, I. Hur hjälpa minnet för tal och årtal? (How to improve memory for numbers and dates.) *Ark. f. Psykol. o. Ped.*, 1929, 8, 50-53.—Graphic representation of the writer's personal visual number-form, with many illustrative instances in the text of how he handles it in recall of numbers and dates.—M. L. Reymer (Wittenberg).

3488. Crosland, H. R. The influence of letter position on range of apprehension—a reply to Dr. Tinker. *Psychol. Bull.*, 1929, 26, 375-377.—Further data from Crosland and Johnson's experiment (see II: 1663).—J. F. Dashiell (North Carolina).

3489. Ewald, F. Untersuchungen über die Komplexweite des Gedächtnisses. (Investigations of the size of complexes of memory.) *Arch. f. d. ges. Psychol.*, 1929, 67, 161-240.—The term *complex* is used by the author to denote a unity of several parts, a group. 17 observers took part in the present experiments. Series of 12, 15, and 16 nonsense syllables were learned by forming groups of various sizes. 7 texts with meaningful material were read twice and then reproduced. The results show that individual differences exist in the size of the groups which can be formed with nonsense syllables. Good learners are usually those who are able to handle large groups; poor learners can form only small groups. The limit was a group of 8 syllables. The average learners of nonsense syllables were the best with meaningful material; they also grouped the texts, while the best learners did not tend to do so. Those who grouped visually made the best scores.—K. F. Muenzinger (Colorado).

3490. Friedline, C. L., & Dallenbach, K. M. Distance from point of fixation vs. intensity as a determinant of attention. *Amer. J. Psychol.*, 1929, 41, 464-468.—The problem was to find out whether the distance from the point of fixation is a determinant of attention. Two stimulus objects, alike save for their intensity and distance from the fixation point,

were compared for their attentional value by determining the intensity at which they were reported equally intense. Only one O completed the series, but on the basis of this one O it is found that the stimulus-object nearer the point of fixation has an attentional advantage over the object farther away, and need not be as intense as the far object in order to equal it in intensity.—D. E. Johanssen (Wellesley).

3491. Hengstenberg, H. *Erwägungen über den Denkvorgang.* (Considerations about the process of thinking.) *Arch. f. d. ges. Psychol.*, 1929, 67, 131-160.—With reference to certain experiments not fully reported in this article special aspects of thinking are stated and discussed. The character of a total experience is determined essentially by the presence of two factors, perceptual and non-perceptual. Perceptual factors, such as the quality of blue, are independent. Non-perceptual factors, such as attention, are dependent, that is, they point to, or demand, other experiences. Actuality is a unity of a perceptual and a non-perceptual factor. The relationship between the two factors is not associative but inductive, analogous to electrical induction.—K. F. Muenzinger (Colorado).

3492. Kamiat, A. H. *The believer's concept of intuition.* *Social Sci.*, 1929, 4, 333-343.—The believer lays claim to the possession of a faculty he calls intuition, that enables him to peer into the nature of things. Intuition is also a term that the devotee employs with reference to his strong sense of certitude. The latter provides the delusion of innerness with a part of its affective substratum. The feeling of conviction covers the mental area, so that doubts are temporarily crowded out of consciousness. Believers may possess intuitions. But if intuition be real, it is an altogether different quality from the process to which they attach the appellation. Intuition, if it exist, is a cognitive instrument. What the believer terms his intuition is a mode of feeling. When faced with a conflict between the product of his reason and that of his "intuition," the believer tends cavalierly to reject the claims of the former. Reason suffers depreciation, but doubts continue to assail the believer. His claim to the possession of a self-certifying intuition may be a defensive device to deal with them. The attitude of the votary toward his "intuition" is one of thoughtlessness.—A. H. Kamiat (Brooklyn, N. Y.).

3493. Kreezer, G., & Dallenbach, K. M. *Learning the relation of opposition.* *Amer. J. Psychol.*, 1929, 41, 432-441.—The problem of this study was to discover at what age children know the meaning of opposition, how the children who do not know the meaning learn it, and at what age they are capable of learning it. 100 children (20 in each 6 months age-group from 5-0 to 7-6) were questioned individually, a verbatim procedure being used. The child was made to indicate whether or not he comprehended the meaning of opposition on two test words; if he did not, he was instructed on the first 10 of the 25 words used, the remaining 15 being given without any aid. It was found that children under

the age of 6-6 do not understand the meaning of opposition, while approximately a fifth of the 6-7-7-0 group, and a third of the 7-1-7-6 year group do understand it. 58 S's, who did not understand the relation at the beginning, learned in an "insightful" way—there was no gradual acquisition, the learning curve dropping immediately from 100% failures to 0%. By treating the data by the method of constant stimuli, it is indicated that there is a probability of 0.5 that a child in the 5-3-5-9 age group will learn the relation.—D. E. Johanssen (Wellesley).

3494. Lindworsky, J. *Einige Bemerkungen über den Reproduktionsvorgang.* (Some remarks about the process of reproduction.) *Arch. f. d. ges. Psychol.*, 1929, 67, 437-440.—A reply to certain criticisms of the author's theory of the process of reproduction, stated in his book *Theoretische Psychologie*.—K. F. Muenzinger (Colorado).

3495. Löw, F. *Logik der Frage.* (Logic of the question.) *Arch. f. d. ges. Psychol.*, 1928, 66, 357-436.—The author discusses the nature of the question by analyzing the structure of knowledge, the relation of the question to knowledge, the relation of the question to the answer, and the classification of questions. A question is a thought which contains a seeking for definite facts. There are only two kinds, deciding and completing questions. For the realization of certain mental states, such as doubt and astonishment, the thinking of a question is a necessary presupposition.—K. F. Muenzinger (Colorado).

3496. Pauli, R. *Zur Psychologie der Geschlechter.* (Concerning the psychology of the sexes.) *Arch. f. d. ges. Psychol.*, 1928, 66, 117-154.—The purpose of this experimental investigation was to determine the difference between the sexes in regard to certain phases of intellectual capacity. 100 men and women students, divided into two equal groups, were given three hours of practice in arithmetic. The first group added continuously with pencil and paper and repeated the operation within a week. The second group mentally added increasing sums. The average speed scores for the women were in all cases smaller (6-10%) than those of the men. As regards errors, the women were better than the men in written addition and worse in mental addition. The distribution of scores was larger for the men than for the women, the worst and best scores always being made by the men.—K. F. Muenzinger (Colorado).

3497. Seemann, J. *Untersuchungen über die Psychologie des Rechnens und der Rechenfehler.* (Researches in the psychology of arithmetic and of arithmetic errors.) *Arch. f. d. ges. Psychol.*, 1929, 69, 1-180.—The author reviews critically other treatises relative to number comprehension. He asserts that the child's first comprehension of number is in the ordinal relationship, the later cardinal comprehension being a result of a generalization of the quantitative factor. He finds, in his analysis of children's efforts to master arithmetical processes, attendant phenomena resorted to, such as optic images, audile recalls, color association, speech, and various motor accompaniments. He finds also linear and

vertical localization and a sense of space relationship of numbers used as aids to memory. He finds in these spontaneous devices possible suggestions for instruction, but recognizes that after the stage of mastery has been reached resort to these is no longer to be depended upon. He claims that errors are not accidental, but products of the concurrent functioning of these determining factors, the perseveration of stronger over weaker ones. He analyzes three types of errors, mechanical, associative, and functional, and traces these through the four fundamental processes. He discovers that the time requirements are shorter for the direct processes, addition and multiplication, than for the inverse, subtraction and division. The latter do not become so easily mechanized.—*A. B. Herrig* (Mount Pleasant, Mich.).

3498. **Stephens, J. M.** A mechanical explanation of the law of effect. *Amer. J. Psychol.*, 1929, 41, 422-431.—A conception of learning, derived from the analysis of a learning apparatus, has been synthesized to produce a learning apparatus. The purely mechanical apparatus is described, on the basis of which the following mechanistic law of learning was evolved: "A connection which results in one effect (probably biologically useful) will not be stamped out and may be stamped in. A connection failing to produce this type of effect, or producing another type (probably biologically harmful) will tend to be stamped out." The object of the paper, which the author feels to be realized, was to show that the current conceptions of learning—notably those of Carr and Thorndike—are capable of such thoroughgoing mechanistic interpretation that a mechanical application of these mechanized principles is a possible and an accomplished fact.—*D. E. Johannsen* (Wellesley).

3499. **Szymanski, J. S.** Zur Denkpsychologie. Die Begriffsgefühle und das Evidenzerlebnis. Das Denken durch Bilder. (Contribution to the psychology of thought. The feelings of concepts and the experience of evidence. Thinking by pictures.) Vienna: Perles, 1929. Pp. 160. M. 6.—The two contributions to the psychology of thinking which form the subject matter of this treatise are concerned with the highly important and yet unclarified problem of the imageless (*unanschaulich*) cognition of concepts and thinking by pictures. The first contribution tends to show on the basis of self-observation that there exists an imageless cognition of concepts (the "feelings of concepts"). This cognition, which seems to play a considerable rôle in the formation of concepts, also has a great significance for the experience of evidence, which reveals itself as being related in the last analysis to ecstasy (which has been investigated on the basis of self-descriptions of mystics). If one remembers how little we know about thinking which is objectified by other means of expression than words, then the significance of the second contribution is self-evident. This contribution treats of logic and the psychological process of thinking through pictures; thus it furnishes material for the investigation of the little-illuminated field of visual phantasy. The logic of thinking by

pictures was investigated on the basis of the finished results of this thinking (drawings, paintings, etc.); the inner process of thinking by pictures was investigated on the basis of self-observation. The investigation of relevant experiences afforded an insight into the nature of visual phantasy ideas, whereby among other things the dependence of the ideational contents upon the specific motor ability of the subject could be ascertained. At the same time the conditions could be learned under which visual phantasy ideas rise in the mind (the rule of the association of two experiences).—*J. S. Szymanski* (Vienna).

3500. **Vogelsang, H.** Experimentelle Untersuchungen über die Einprägung simultan gebotener Objekte. (Experimental investigations concerning the memorizing of objects presented simultaneously.) *Arch. f. d. ges. Psychol.*, 1929, 67, 257-306.—Cards with 4, 6, 8, 10 and 12 geometrical figures and letters were exposed repeatedly for 1 sec. until the observer was satisfied that he had learned what was presented. He then drew the card. The number of expositions for the cards increased regularly with the number of elements up to 8 elements and then reached a plateau, the better learners attaining the plateau later than the poor ones. This plateau was assumed by the author to be an indication of the formation of complexes or groups. The number of expositions was much smaller for letters than for geometrical figures. It did not differ very much whether the arrangement was in a small circle, in a large circle, or asymmetrical. All observers, of whom there were 6, stated that they never perceived the elements simultaneously but always successively. When the observers were asked to fixate a certain point on the cards they were also unable to perceive their contents simultaneously. Other modes of presentation had similarly negative results.—*K. F. Muenzinger* (Colorado).

[See also abstracts 3443, 3514, 3830, 3839, 3895.]

## NERVOUS SYSTEM

3501. **Allen, W. F.** Effect of repeated traumatization of the central nerve stump of the hypoglossal nerve on degeneration and regeneration of its fibres and cells. *Anat. Rec.*, 1929, 43, 27-32.—The purpose of the study was the determination of the effect of repeated, in comparison with a single, traumatization (1) on the fibers and cells of the central stump of a nerve, and (2) on the extent of its regeneration. The experiment seems to show that repeated injuries (x6 and x9) to the hypoglossal nerve of the cat caused no more degeneration than a single injury. Regeneration seemed to be complete in four months after a single traumatization, and almost complete in the case of repeated traumatization.—*H. R. Laslett* (Oregon State).

3502. **Ballance, C., Colledge, L., & Bailey, L.** Further results of nerve anastomosis. An illustrated record of some experiments in which: 1. The central and peripheral ends of a divided nerve were implanted at varying distances apart into a neighboring normal nerve. 2. Certain nerve-trunks

of the limbs were divided and anastomosed by suture in cross-wise fashion. *Brit. J. Surgery*, 1926, 13, 533-558.—Protocols of a series of 12 animals operated upon as indicated in the title.—(Courtesy *Biological Abstracts*).

3503. Casamajor, L. Central nervous system factors. *Amer. J. Psychiat.*, 1928, 8, 457-465.—The evolutionary development of the brain is discussed, together with the possible reactions of the mammal at each stage of development. The author finally concludes that "animals incapable of developing conditioned reflexes or symbols are probably incapable of consciousness."—W. M. Rosebrook (Boston Psychopathic Hospital).

3504. Globus, J. H. Neuroanatomy. A laboratory guide with text and 80 figures. (4th ed.) New York: Hoeber, 1929. Pp. lxvi + 48. \$3.50.—A guide for the dissection of the human nervous system.—N. L. Munn (Clark).

3505. Loban, J. M. A textbook of neurology. Denver: Bunn-Loban, 1929. Pp. xii + 563. \$10.00.—This text is arranged for classes in chiropractic and for practitioners. It contains 117 illustrations.—N. L. Munn (Clark).

3506. Stegall, P. A. A method of differential staining of the human brain. *Anat. Rec.*, 1929, 42, 399-401.—The writer gives a simple, quick, and inexpensive method of differential staining of the gray and white matter of the human brain, especially useful in connection with his method of parowax sectioning of the whole human brain (*Anat. Rec.*, 1925, 29, 341).—H. R. Laslett (Oregon State).

[See also abstracts 3552, 3591, 3625.]

#### MOTOR PHENOMENA AND ACTION

3507. Chou, S. K. Reaction-keys and a new technique for reading-reactions. *Amer. J. Psychol.*, 1929, 41, 469-473.—A direct experimental attack upon the question of the relative rates of tapping permitted by the ordinary telegraph key and the Stanford thumb-and-finger key. A calibrated pendulum time-marker was used to time the two modes of tapping. It was found that the tapping with the latter instrument is faster, though it is a more sensitive recorder of fatigue effects; the average fatigue-index for the thumb-and-finger key is 16.40%, while that for the telegraph key is 11.44%. The technique for reading-reactions described consists of a tachistoscope whose shutter is controlled by S with an ordinary telegraph-key; the total time necessary for reading a definite amount is recorded by releasing the key and allowing the shutter to drop. The author considers that the necessity of keeping the key pressed down in order to read constitutes a check upon, if not an intensifier of, the attention of S.—D. E. Johanssen (Wellesley).

3508. Davenport, C. B. Human metamorphosis. *Amer. J. Physiol. & Anthropol.*, 1926, 9, 205-233.—Numerous collections of individual mass measurements, mostly of Nordic stock, derived from several sources are combined to find the growth curves of men. A few series of repeated measurements on indi-

vidual children from birth to maturity are included, especially span, sitting height, leg length, relative chest girth and certain elements of stature. The curve of average development of stature shows only 2 of Robertson's 3 phases of cycles in the growth curve of man. Robertson's 2d cycle is indeed due to a selection consequent on the methods employed in gathering the statistics. A comparison of the body weights for the 2 sexes shows that the weight of the female is below that of the male until 11½ years, when it comes to exceed that of the male and so remains until 15½ years when, with diminishing velocity of growth, it passes below the male curve. The annual increments of body weight show two periods of high velocity, namely, at the moment of birth and at 13 for girls and 15 years for boys. Just before birth the increments in weight are at a greater rate than at any other time. The measurement of span requires special technique to secure maximum stretch. The female span is less than that of the male until the 8th year when it surpasses that of the male, and so continues until the 15th year when it falls behind. Span changes at about the eighth year in the boy and 7th in the girl from less than stature to greater than stature. Sitting height of the female is much less than that of the male from 4 to 11 years, exceeds the male from 12-16 years and then falls behind it again. Leg length is much shorter than sitting height from birth until the 13th year, after which it exceeds sitting height. Relative sitting height declines from about 59% at birth to 52% in the 12th year for girls and in the 13th year for boys. Then the relative sitting height rises again. Relative chest girth for males diminishes from 67% at birth to 48% at 12 years then rises to 53%. If the total stature is divided into 6 portions by the 5 principal intermediate landmarks, then the curves of yearly increments of stature are very irregular. Human development shows different laws at different points in development; in utero it proceeds in practically geometric fashion; at adolescence it follows the autocatalytic formula; during later childhood the increments are arithmetical. The growth processes at the 2 great growth episodes of development act differentially on different parts of the body. Hence different internal secretions are probably responsible at these two epochs. It is concluded that the body does not grow as a whole but growth is a resultant of several differentially acting internal stimuli. In different races the relative activity of these stimuli are diverse, resulting in the differences in proportion of the different races.—C. B. Davenport (Courtesy *Biological Abstracts*).

3509. Downey, J. E. Further observations on the manner of clasping the hands. *Amer. Nat.*, 1926, 60, 387-391.—This paper presents evidence, in the form of significant percentage differences, that clasping the hands with the left thumb outside points to latent sinistral tendencies in the case of man. Some curious discrepancies occur in the results for the sexes, the causes of which are obscure. In presenting the material with reference to the thumb outside in clasping the hands, attention is called to 3 different

types of righthandedness and 3 of lefthandedness which give different percentages with reference to the dominant thumb, some of which are significant. The general approach is similar to that of Lutz, but somewhat different conclusions are reached.—J. E. Downey (Courtesy *Biological Abstracts*).

3510. Fox, A. N. A modification of the Babinski phenomenon. *J. Nerv. & Ment. Dis.*, 1929, 69, 414.—In this modification of the Babinski phenomenon it occurs with the release rather than the application of the stimulus.—R. A. Young (Boston Psychopathic Hospital).

3511. Gemelli, A. Recherches sur la nature de l'habileté manuelle. (Researches on the nature of motor skill.) *J. de psychol.*, 1929, 26, 163-200.—The principal categories of manual skill are as follows: (1) all motor skills adapted rigidly to an end to be attained; (2) "motor skills which result from automatized movements in their compounds and which are even directed toward an end, but which lack a personal physiognomy because of their stereotyped nature"; (3) motor skills which result from certain movements not having a high degree of automatism because the different movements are relatively independent of each other; (4) motor skills resulting from automatized movements which are relatively independent and subordinated to the end to be attained, this end being the reason for their coordination. There is a phenomenological analysis of manual skill and a discussion of the elements entering into the different types of skill. The author considers a determination of the following aspects of skill to be important to applied psychology: (1) the finesse, continuity, and discriminative power of perceptive activity, and the connection of perception with motor impulses; (2) the influence of exercise on the adjustment of movements to the ends to be attained; (3) the curve of learning and the factors which influence it; (4) the influence of intelligence on learning; (5) transfer of training from one acquired motor skill to another motor activity. A number of experiments on some of these points are briefly discussed.—N. L. Munn (Clark).

3512. Goodenough, F. L., & Brian, C. L. Certain factors underlying the acquisition of motor skill by pre-school children. *J. Exper. Psychol.*, 1929, 12, 127-155.—A study of the acquisition of skill in a ring-throwing game by groups of pre-school children. The results present learning curves, correlations with intelligence quotients, between initial status and gain, sex differences, and so on. A detailed analysis of some twenty individual records is printed. The three groups of subjects performed under differing instructions and methods. Group A were given no instruction nor criticism with regard to methods of throwing the rings. Group B were given a preliminary demonstration and subsequent verbal criticism as to types of errors, but not required to adhere to constant procedure in grasping and throwing the rings. Group C in addition to a preliminary demonstration and verbal criticism, were taught to follow a definite procedure in throwing and were not allowed to experiment with other methods. During

a 50-day period the amount of improvement was least for the children of Group A, only slightly higher for those of group B, and very much greater for group C. No relationship was found to exist between initial status and gain and a small negative correlation was found between total score and IQ.—S. Renshaw (Ohio State).

3513. Klages, L. Die Triebe und der Wille. (The instincts and the will.) *Arch. f. Psychiat.*, 1928, 85, 478-479.—An attempt to clarify the concepts. Instinct is a vital cause of the change of a state of movement. The drive in instinct consists of quality (generally directed instinctive impulse) and of intensity (strength of the impulse so directed). Vital movement differs from mechanical movement in purposiveness. Willing is conditioned by interest as direction of willing. The will does not cause movement; it is the force of inhibition, the possibility of steering. The will strives not to let anything occur which leads away from the direction of the purpose. The "I" as a steering force arises through a close connection of vitality and mind. Characteristic qualities of distinction of instinct and will are derived from the difference of their nature.—O. Graf (Munich).

3514. Pear, T. H. The nature of skill. *Brit. Asso. Adv. Sci.*, 1928. Pp. 2-18.—In this article the author treats the more practical bearings of the nature of skill as applied to contemporary industrial and occupational problems.—W. C. Beasley (Ohio State).

3515. Pear, T. H., Langdon, J. N., & Yates, E. M. "Transfer of training" and "transference." *New Era*, 1928, July.—A brief but suggestive analysis of a persistent problem, concerning which the authors distinguish two meanings of transfer: (1) transfer as the result of exercise of any specific function, and, in the absence of abstract sentiments, due merely to the exercise of that function; (2) transfer as the result of the development of an abstract sentiment, the particular function trained being merely the means by which the sentiment may be exercised. The authors conclude that in view of experimental evidence it seems improbable that transfer of type (1) is common or occurs at all; and, secondly, that transfer of type (2), whether positive or negative, is an established fact.—W. C. Beasley (Ohio State).

3516. Pintner, R. Speech and speech-reading tests for the deaf. *J. Appl. Psychol.*, 1929, 13, 220-225.—A study of the relationship between speech and speech-reading tests and intelligence and educational achievement tests given in schools for the deaf during a recent survey. Using two measures of speech-reading and two measures of intelligibility of speech for the pupils of the three most advanced classes in each school studied, it was found that within this select group there is no correlation between intelligence and intelligibility of speech, or ability in speech-reading. Between speech and speech-reading and educational achievement, however, the correlations are positive and marked. Correlations between intelligibility of speech and amount of residual hearing and age of onset of deafness are slightly positive.

These results would seem to indicate that after a certain level of intelligence has been reached, intelligence of the non-verbal type is not a factor in speech and speech-reading. Educational attainment is, however, somewhat connected with both. Better measures of all these variables are needed.—*G. L. Barclay* (Nebraska).

3517. *Pittfield, R. L.* The Hoffman reflex—a simple way of reinforcing it and other reflexes. *J. Nerv. & Ment. Dis.*, 1929, 69, 252-258.—The Hoffman reflex is not so reliable a sign as the Babinski. Its relative activity does not denote the severity of the lesion, but is a common concomitant sign in high pressure cases. The method of eliciting the reaction and reinforcing it is given. (Case histories and references.)—*R. A. Young* (Boston Psychopathic Hospital).

3518. *Shirley, M.* Spontaneous activity. *Psychol. Bull.*, 1929, 26, 341-365.—A review of 63 experimental studies. Three types of apparatus for measuring amount of drive are: the tambour cage or platform, the revolving drum, and pedometers. The study of rhythms of activity has aided this measurement. Some energy sources have been determined, especially hunger pangs, a sex hormone, epinephrin, and the state of well-being of the muscular system. Incidental factors inducing greater activity include starvation, moderate rest, nicotine, sodium phosphate, sexual abstinence, and certain brain lesions; while those retarding activity include malnutrition, alcohol, caffeine, too long rests, fatigue, gestation and lactation, and possibly certain brain lesions. Rate of learning mazes is not found to depend upon activity level. Individual differences in activity are great.—*J. F. Dashiell* (North Carolina).

3519. *Steinhauer, H.* A concrete interpretation of Schopenhauer's notion of the will. *Monist*, 1929, 39, 161-169.—The author attempts to correct certain common errors in the interpretation of Schopenhauer's conceptions of will, intellect, imagination, etc. Most biographers and critics of Schopenhauer emphasize the practical turn of his mind, but accuse him of positing a metaphysical catch phrase—cosmic will—which is as meaningless as any other type of Absolute. This notion is derived from an analogy in human conduct. Both objections vanish when it is realized that Schopenhauer's theory of will is based on concrete experience, not an abstract reasoning. Intellect and will simply refer to the duality of rational and irrational which is observable in human behavior. Will is a negative concept, something irrational and unknowable, devoid of all positive characteristics. Schopenhauer extends the term intellect to include intuition and imagination as may be seen from his use of the term in explaining the phenomena of esthetics and ethics.—*C. M. Diserens* (Cincinnati).

[See also abstracts 3503, 3508, 3649, 3690, 3718, 3779, 3804.]

#### PLANT AND ANIMAL BEHAVIOR

3520. [Anon.] Hearing as a help in the laboratory maze. *Science*, 1929, 69, xiv.—Report of a

paper by J. F. Shepard before the Michigan Academy of Science, Arts and Letters. Rats which had learned a maze were no longer able to run it when sound-proof floors were installed. Experiments are in progress to ascertain whether there are auxiliary controls.—*R. R. Willoughby* (Clark).

3521. *Baldensperger, P. J.* Early migrations of honeybees. *Gleanings in Bee Culture*, 1926, 54, 22-24.—A discussion of the changes in behavior of honeybees when introduced to new localities. The origin of different races based on behavior differences is thus attributed to different environment.—*E. F. Phillips* (Courtesy *Biological Abstracts*).

3522. *Barthélémy, H.* Recherches biométriques et expérimentales sur l'hibernation, la maturation et la surmaturation de la grenouille rousse ♀ (*Rana fusca*). Biometric and experimental researches on hibernation, maturation and over-maturation of the frog. *C. r. Acad. Sci. (Paris)*, 1926, 182, 1,653-1,654.—In nature ♀ frogs bury themselves in the mud in October and remain without food until March, the time of sexual maturation. Placed in artificial surroundings, water, soil, darkness, or light, frogs hibernate and mature sexually, if kept at a temperature of 2-3° C. They will preserve their weight or even gain a little. Below 0° C. they die, above 8-10° C. they remain active, may lose body weight and do not mature sexually. The animals preserve their weight better when placed in a dark and moist environment. During sexual maturation, both in nature and in the laboratory, there is a sudden increase in weight. Ripe females kept alone in water at 2-3° C. undergo over-maturation, and suffer a decrease in weight. The author concludes that a low temperature is necessary but not sufficient for hibernation of the female *Rana fusca*, and that the state of hibernation cannot be kept up indefinitely, even if temperature remains low. Hibernation is brought to an end by sexual maturation.—(Courtesy *Biological Abstracts*).

3523. *Brown, C. R., & Hatch, M. H.* Orientation and "fright" reactions of whirligig beetles (*Gyrinidae*). *J. Comp. Psychol.*, 1929, 9, 159-189.—Stream-dwelling *Dineutus discolor* Aubé and pond-dwelling *Dineutus* and *Gyrinus* orient themselves, in the laboratory, wholly in response to light on either the dorsal or the ventral eyes; they even dive towards submarine light; and in darkness they show no gregariousness. No orientation to still as against running water was evidenced; nor was it shown to complex patterns. However, there appears to be in the field, orientation to light and dark portions, i.e., to the pattern, of the stimuli. "Fright" reactions, with minimal size of stimulus, seem to be a function of the complexity of the visual field instead of the changes of brightness. A spot is reacted to only after habituation to a less complex pattern, this habituation being variable in duration but approximating one minute in length. The sudden change from black to white or vice versa is effective for the "fright" reaction when the stimulus area does not fall below 76 square degrees or a circular spot which

subtends a plane angle of  $10^\circ$ . 5 references.—H. R. Crosland (Oregon).

3524. D'Esplagnes, P. M. *La vida de les abelles*. (The life of bees.) *Criterion*, 1929, 6, 127-142.—The author discusses the works of Maeterlinck and Fabre concerning investigations made into the habits of bees. Philosophical objections are made to some of their theories regarding the mental life of Hymenoptera.—J. W. Nagge (Harvard).

3525. King, H. D., & Donaldson, H. H. Life processes and size of the body and organs of the gray Norway rat during ten generations in captivity. *Amer. Anat. Memoirs*, 1929, No. 14. Pp. 106.—This analysis is based on data for the first ten generations descended from six wild Norway females brought into the Wistar Institute animal colony in 1919. The data comprise 1,539 litters containing 9,505 individuals about evenly divided as to sex. Data on body growth, variability in weight at birth, variability in weight at different ages, average age at which first litters were cast, average number of litters, average size of litters, sterility, sex ratio, mortality, behavior, and measurements of various parts of the body, etc., are presented in detail. During the 10 generations there was a marked change in behavior. The rats gradually lost their savagery and fear of human beings and their nervous tension was considerably decreased. The rats of the later generations were still, however, more nervous than the strains of albinos. It is thought that "when captivity has rendered them tame enough to be handled easily, they should be valuable material for experimental work requiring a pure strain of known ancestry." Bibliography.—N. L. Munn (Clark).

3526. Leuba, J. H., & Fain, V. Note on orientation in the white rat. *J. Comp. Psychol.*, 1929, 9, 239-244.—A cage led by a door into a maze. After the rat had learned to run the maze, always entering it from his cage, no change was found to occur in the maze-running behavior as a result of rotating both the cage and the maze through angles of  $90^\circ$ ,  $180^\circ$ , and  $270^\circ$ . But when the cage was disconnected and the maze alone rotated through  $180^\circ$ , the animals behaved as in a new maze. Hence the cage became, during learning, an orientation reference point, the first turn in the maze being learned in spatial relationship with the starting point, the cage. Thus the rotation of both led to no disorientation, but the rotation of only one (especially of the cage for a period of 24 hours) seriously disrupted the animal's spatial orientation. While it is possible that the orientation was a kinesthetic-motor affair, still these findings are not in conflict with those of Carr, since his rats had opportunity to recover from rotation-giddiness before beginning a run in his maze, and since a period of 15 minutes of detention in a rotated cage was ineffective in producing disorientation. 3 references.—H. R. Crosland (Oregon).

3527. Ligon, E. M. A comparative study of certain incentives in the learning of the white rat. *Comp. Psychol. Monog.*, 1929, 2, No. 28. Pp. 95.—The chief apparatus in this investigation was a tri-dimensional, straightaway, errorless maze constructed

of wire mesh. There were a number of separate compartments, the separating partitions, in which a small hole had been made, consisting of wire mesh. This hole differed in position from one partition to another. The rat was placed in the apparatus and was then required to run through the various compartments, placed in a straight line, to the food box. The holes were closed to prevent retracing. In such a maze the only criterion of learning could be time. Activity cages attached to activity chronographs were used at various times to determine the amount of activity present outside of the experimental situation. A number of problems were undertaken. These involved deprivation of food for 0, 6, 12 and 21 hours, the presence or absence of a food reward in the food box, the presence of a strange rat in the food box, the presence in the food box of a rat with whom the subject was associated while in the living cage, the presence of a sounding buzzer in the food box, etc. There were various combinations of the above factors. In all of the experiments three different groups deprived of food for 6, 12 and 21 hours respectively were run on three different mazes of similar design. All the rats were about 60 days of age at the beginning of the experiment. For the various periods of deprivation the 21-hour group was superior to the other two groups. The animals running 6 hours after the previous feeding were very much superior to those running with 12 hours of deprivation. The activity records for the same animals showed that the same positions were maintained. It was found that, without exception, the greatest activity existed between 5 and 7 hours after feeding. In the experiments involving the presence of another rat in the food box, the differences were unreliable. The best records were made by the rats running to a cage mate. Two groups of rats were run in the buzzer situation, one to a food box which contained buzzer and food and the other to a food box containing a buzzer but no food. They were also divided on the basis of length of deprivation from food. The first group were far superior to the second regardless of the length of deprivation. When two groups of rats were run to boxes without food, one of these containing a buzzer and the other not, the group in the buzzer situation were superior. "When all groups are compared, the two running immediately after feeding are the poorest. The group running to an empty cage, after six and twelve hours of no food, was next in line. The two groups running to 'the presence of another rat' were barely superior to these. The groups . . . running to a food-reward, were better than any of the preceding. The group running in the buzzer situation to an empty cage was superior to the last named for the first half of its series of trials, but inferior for the last half. The group running in the buzzer situation to a food-reward was far superior to any in the investigation." Under all conditions the group deprived of food for six hours, the most active group as shown from the activity records, was superior in the majority of trials. The problem of reliability of the maze is also discussed, the author suggesting that the source of reliability lies in the motivation of the

subjects and not in the measuring device. Bibliography of 65 titles.—N. L. Munn (Clark).

3528. Maier, N. R. F. Reasoning in white rats. *Comp. Psychol. Monog.*, 1929, 6, No. 3. Pp. 93.—The purpose of the investigation was "to learn whether or not rats can solve problems without 'trial and error.' That is, can a rat, placed in a certain situation, adjust itself intelligently or adequately for its purpose, without previously having learned to respond in the situation concerned and without making a series of random responses that finally lead to an adjustment? Or further, can a rat be placed in a situation in which it can, by its solution, demonstrate insight?" To determine the answer to these questions 15 different experimental situations, in which food could only be obtained by an indirect route, were devised. Altogether 10 rats were used. There is a detailed account of each response of each rat in each situation. In many of the situations used in this experiment the rat first responded in a random "trial and error" fashion, then he suddenly changed to a "purposeful" form of behavior and thereafter continued in such behavior, which the author considers indicative of "insight." "The behavior of rat C is an unusually good example of what is probably insight. After 260 seconds of 'trial and error' near the cage the rat suddenly changes its behavior by starting for the floor and going directly to the ringstand that leads to the desired goal. Only 20 seconds were used to make the trip across the floor . . . there was little doubt as to whether it was headed for some particular place or was just wandering about in a 'trial and error' manner." An interpretation of his results leads the author to conclude that they cannot be explained by means of a "trial and error" hypothesis nor by an hypothesis based upon some kind of association. He develops a pattern hypothesis and says, "The concept of patterns or *Gestalten* thus seems to be a necessary assumption to explain these complex types of behavior. The fact that a rat can choose the shorter means to an end without previously having reached this end by any of these means, seems to make a pattern concept almost a necessity. A temporal chain is not sufficient, it must be an immediate whole. . . . As the combination of two patterns in the solution of a problem is at the bottom of theories of reasoning that make reasoning more than 'trial and error,' it must be granted that white rats also reason."—N. L. Munn (Clark).

3529. McIndoo, N. E. Tropisms and sense organs of Lepidoptera. *Smithsonian Miscell. Collect.*, 1929, 81, 1-59.—"The object of this paper is to bring together the available information on the tropisms and sense organs of Lepidoptera, hoping that this information will encourage a more serious study of tropic responses." Apparently such studies will be of value in economic entomology. The author reviews the available literature and gives the results of his own experiments on codling-moth larvae for each of the following: phototaxis, chemotaxis, geotaxis, and thigmotaxis. His own experiments show that "at cocooning time the larvae were strongly

photonegative, geopositive, and thigmopositive, whereas during their earlier instars they either behaved indifferently to light, gravity and touch, or were photopositive, geonegative and thigmonegative." The second section of the paper describes and discusses the probable function of the several receptor organs thus far noted for insects. There is a bibliography of 93 titles.—C. M. Louttit (Hawaii).

3530. Pisek, A. Untersuchungen über den Autotropismus der Haferkoleoptile bei Lichtkrümmung, über Reizleitung und den Zusammenhang von Lichtwachstumsreaktion und Phototropismus. (Autotropism of the oat coleoptile during photostasy; conductivity of stimuli and the connection between the reaction of photo-auxeses and phototropism.) *Jahrb. Wiss. Bot.*, 1926, 65, 460-501.—The author reports first his observations concerning the dorsiventral nutation of the coleoptile. Even in erect seedlings grown in the dark the apex is often inclined somewhat away from the grain. On the clinostat the curvature becomes more pronounced the longer the plants are rotated, though individual differences are common. Whereas occasional individuals do not nutate dorsiventrally, in others the curvature reaches approximately 90° in 8-10 hours. The great majority, however, are intermediate in their reaction. Such endonomic curvatures may greatly obscure the course of tropic movements. The author describes a method for differentiating between such curvatures and genuine tropic reactions. The phototropic reactions were followed for 24 hours in the clinostat under stimulation with different light intensities; only those plants which yielded relatively pure tropic responses are considered. Details of recording the results are given. It was found that in positive reactions, as the movement progresses gradually from apex to the base, the curvature angle steadily increases for 4 (or more) hours until—again from the apex down—autotropic straightening sets in. Only in stimuli with weak tropic effect does sufficient autotropic readjustment take place also in the lower part of the coleoptile to result in reasonably erect seedlings. In vigorous phototropic reactions at best only a slight reduction occurs in angle of curvature. As a rule the progressive autotropic stretching of the upper part is balanced by an increase in curvature at the base (decrease of the angle of curvature) until the growth of the base ceases, thus fixing the curvature. In this case the autotropic compensation proceeds only so far that the angle of curvature attained in 6-7 hours is scarcely exceeded. The same is true of the so-called negative phototropic reaction of the coleoptile in the rare cases in which the microscopic observation could be made; in comparison with the positive, the negative reaction was small unless dorsiventral nutation accompanied it. Moreover, under the prescribed experimental conditions within definite limits of stimulation, negative reaction occurred only partially and irregularly; the author therefore does not rank it with the typical positive reaction. Strong positive reaction follows exposure to light of 20 MR whether for 12 seconds or for ½ hour. These results were applied in ex-

periments with partial illumination to test out Brauner's theory of phototropic curvature. Seedlings with only the apex (1 mm.) illuminated curved as much or only slightly less than completely illuminated control plants; conversely, plants with the apex darkened and otherwise illuminated did not react, or only weakly so. Therefore the increased permeability which Brauner found in the coleoptile as the result of light action has no immediate bearing on the conduction of the stimulus. The 2 above mentioned stimulation dosages ( $m$  and  $M$ ) applied to the apex of seedlings on the clinostat caused in 3 hours a curvature of  $80^\circ$ . The difference in growth between the shady and the illuminated sides was in this case calculated to be 2 mm. Embryos were then illuminated at the apex with  $m$ ,  $m/2$ ,  $M$ , and  $M/2$ . It was found that the increase after exposure to light compared with the increase in the dark (in both cases measured in plants remaining erect) showed neither a noteworthy inhibition nor stimulation, to which might be ascribed the differential growth during curvature. The author therefore believes that the phototropism of the oat coleoptile cannot be interpreted merely as the resultant of the photoauxesis reaction of the illuminated and the shady side of the organ, as Blaauw maintains, but recognizes in tropism a process largely independent of the growth reaction.—*A. Pisek* (Courtesy *Biological Abstracts*).

3531. Rabaud, Et. *Sociétés animales et phénomènes collectifs*. (Animal societies and collective phenomena.) *J. de psychol.*, 1929, 26, 145-152.—In animal societies two distinct types of collective activity are observable. These are (1) reflex movements of *ensemble* brought about by external stimuli, and (2) an "incontestable direct union between individuals, independent of all exterior excitation." Several illustrations of these collective phenomena are presented.—*N. L. Munn* (Clark).

3532. Reed, H. S. Humidity and song. *Science*, 1928, 68, 454.—The western meadowlark (*Sturnella neglecta*) sings most frequently when the air has a relatively high humidity.—*R. R. Willoughby* (Clark).

3533. Robertson, C. Flowers and insects; lists of visitors of four hundred and fifty-three flowers. New York: Science Press Distributing Co., 1929. Pp. 221. \$3.00.—*W. S. Hunter* (Clark).

3534. Sonnenschein, A. Z. Die Heimkehr fühlloser Bienen, ein Beitrag zum Orientierungssinne der Honigbiene (*Apis mellifica* L.). (Orientation of bees without antennae.) *Akad. Wiss. Wien Math. Naturw. Kl. Anzeiger*, 1926, 62, 55-56.—Bees with antennae removed returned to hive; it is concluded that sight is important in orientation and that for this purpose the sense of smell is not indispensable.—(Courtesy *Biological Abstracts*).

3535. Steinach, E., Heinlein, H., & Wiesner, B. P. Auslösung des Sexualzyklus, Entwicklung der Geschlechtsmerkmale reaktivierende Wirkung auf den senilen Organismus durch Ovar- und Placentaextrakte. Versuche an Ratten und Meer-schweinchen. (Reestablishment of sex cycle, development of sex characteristics, reactivating action,

upon senile organism through extracts of ovary and placenta. Tests on rats and guinea pigs.) *Akad. Wiss. Wien Math. Naturw. Kl. Anzeiger*, 1925, 62, 189-191.—(Courtesy *Biological Abstracts*).

3536. Sturman-Hulbe, M., & Stone, C. P. Maternal behavior in the albino rat. *J. Comp. Psychol.*, 1929, 9, 203-237.—The parturient albino rat exhibits a strong nest-building tendency, which is apparently motivated by factors within the female rather than from the external environment. The virgin and non-lactating multiparous animals lacked the tendency; it was present in every parturient female, even the multiparous parturient which had recently borne and suckled her young; it showed itself in the female when a young litter had been substituted for her older brood. Females exhibited a large ability to adapt, without the aid of prior experience, their maternal behavior to the exigencies of the moment. They chose dark places for nest sites; and when nest and litter had been removed by the experimenter to a lighted area, they would move them back again to the dark regions. Nest and brood were moved to avoid strong air currents and too high temperatures. If the breeding period is not too far past, nest building may be induced by temperature changes, or its period may be lengthened by the same means. The tendency to build shows itself more frequently at night. Excelsior or shavings are preferred over dirt or gravel, and dirt is more preferred than gravel. The shape and texture of the nest seem to be results of the weight and movements of the mother and the young, the contents having been thrown together in an amorphous heap without design or system. Nest building is an associate of behavior characteristic of the delivery, cleansing, suckling, and general care of the young. Conditions of blindness and anosmia have no effects upon such behavior. 10 references.—*H. R. Crosland* (Oregon).

3537. Upton, M. The auditory sensitivity of guinea pigs. *Amer. J. Psychol.*, 1929 41, 412-421.—Feeling that the previous work on the auditory sensitivity of mammals presented no genuine evidence that animals are incapable of responding to tones, a method was utilized in the present experiment which involved conditioning guinea pigs so that they would invariably respond by a change in the respiratory rhythm when tones of a particular pitch were sounded. Four animals of from 8 to 12 months of age were used, records of the breathing being taken with a kymograph. The conditioning tone had a frequency of 600 d.v./s. Under normal conditions the breathing of the animals was very irregular; after presenting the conditioning tone together with a slight electric shock about 250 times it was found that during the presentation of the tone the breathing curve smoothed out; at the termination of the tone the irregular breathing occurred again. After about 500 presentations a true conditioned response appeared, i.e., a great increase of the amplitude of the breathing cycle correlated with the end of the tone which was presented without a shock. The specificity of the conditioning for a particular pitch was shown

by the failure of the test tone of 1,000 d.v./s. to elicit responses.—*D. E. Johannsen* (Wellesley).

3538. **Williams, K. A.** The reward value of a conditioned stimulus. *Univ. Calif. Publ. Psychol.*, 1929, 4, 31-55.—75 white rats were trained to discriminate a white from a darkened compartment in a simple discrimination box. The food box was situated at the end of the apparatus at a point equidistant from both compartments. The compartments were changed according to a chance order. After the rats had all learned to run to the food box via the white compartment the author desired to know whether the white compartment had become a conditioned stimulus sufficient to maintain the discrimination in the absence of food. Her animals were now divided into 3 equal groups. The first group was required to run one trial daily in a maze without reward. Two hours later they received their daily portion of food after running 10 trials in the discrimination box. After nine days the conditioned stimulus (the discrimination box) unaltered in every respect except that the food dish was empty, was introduced at the end of the maze. The second group was given 15 daily trials on the maze without reward, thus receiving the same treatment for the entire 15 trials that the first group had received on the first 8 trials. Like the first group these rats were fed two hours later after running through the discrimination box. The third group was given one trial a day in the maze, preceded by a test series in the discrimination box lasting until three consecutive correct responses had been made. They then ran the maze from which, after reaching a plain end box, they were lifted into the discrimination box where they made their response and received food. Like the other groups they were fed two hours later in the discrimination box. Errors and total time were recorded for the maze. The results indicated that the conditioned stimulus has the reward value of food. "That is, the animal will learn to traverse a maze for the sake of a white compartment alone, with an alacrity as great as that evinced for the sake of food itself. On the other hand, the conditioned stimulus rapidly loses this reward value when, in the problem-situation, there is no reinforcement by the unconditioned stimulus, i.e., when the white compartment is regularly found empty at the end of the maze . . . the loss of the reward value is . . . concurrent with the loss of just that character which originally identified our 'conditioned stimulus' . . . those animals which ceased to run the maze efficiently for the sake of the (empty) white compartment, ceased concomitantly to make, in the box, when they had reached it through the maze, the reaction appropriate to the white compartment as representative of food." Although both the discrimination box and maze seemed reliable instruments in themselves practically no correlation between them was found.—*N. L. Munn* (Clark).

3539. **Woodrow, H.** Discrimination by the monkey of temporal sequences of varying number of stimuli. *J. Comp. Psychol.*, 1929, 9, 123-157.—Three untamed *rhesus* monkeys were trained to reach

for food upon the larger number of sounds (taps), with a fixed interval of time of 1.5 secs. between them, and to refrain from reaching upon the sounding of the smaller number of taps. The number of sounds, within the varying intervals, varied from 1 to 6, 1 being presented with 2, 1 with 3, 2 with 3, and so on, as comparison stimuli to be discriminated by the animal. All three of the subjects learned to discriminate combinations up to 4 sounds per interval, but beyond that number, as between 4 and 5 or 5 and 6, very little learning occurred. Some transfer characterized two of the animals, on stimuli of 3 vs. 4 sounds. The time interval separating the sound components of a stimulus and the quality of the sound rather than the abstract number of taps were found to be effective factors influencing the discrimination. Hesitation, immediately prior to incorrect responses, suggested a real discriminatory process, as did also the gradual merging of the reaching behavior into a form almost identical with the restraint response, affording the animal a ready means of correctly and speedily reacting to the proper stimulus upon its presentation. 2 references.—*H. R. Crossland* (Oregon).

[See also abstracts 3466, 3591.]

#### EVOLUTION AND HEREDITY

3540. [Anon.] *Bibliographica Eugenica*, 1929, 1, 211-226. (Supp. *Eug. News*, 1929, 14.)—*B. S. Burks* (Stanford).

3541. [Anon.] Committee on family records of the National Research Council. *Eug. News*, 1929, 14, 80-81.—This committee is to continue for the year 1929-30 upon its work of investigating a desirable method for the study of family history on the pedigree or eugenical basis.—*B. S. Burks* (Stanford).

3542. [Anon.] The third annual report of the *Eugenics Survey of Vermont*. Burlington: Univ. of Vermont, 1929. Pp. 24.—This report contains some brief paragraphs on the office work, a list of English corruptions of French names, a summary of genealogical data on the better branches of the Rector family, a summary of data on the children of feeble-minded and insane parents, a statement of change of program, and a brief statement of the budget. The data on children of feeble-minded and insane parents include 6,000 individuals. The average number of children per inadequate family (one or both parents deficient) was found to be 3.5, exclusive of those who died in infancy, stillbirths, and sex unknown. The corresponding figure for families not known to be inadequate was 3.04. The changes of program now being carried out are a comprehensive survey of varied aspects of rural life and a study of key families in certain typical rural communities.—*M. N. Crook* (Clark).

3543. **Dayton, N. A.** Order of birth and size of family. *Amer. J. Psychiat.*, 1929, 8, 979-1,006.—This is a survey of 10,455 retarded children in the public schools of Massachusetts. The following conclusions are drawn: (1) order of birth of the re-

tarded or mentally defective child is apparently of little significance; (2) foreign-born women are over-represented as mothers of this group; (3) families having a mentally defective child show a tendency to be larger than families having a retarded child; (4) native-born mothers of retardates and mental defectives have larger families than the general population of native mothers of the same age groups in New York State; (5) completed families with a child in the lower levels of intelligence are approximately twice as large as completed families with a child in the upper levels of intelligence.—W. M. Rosebrook (Boston Psychopathic Hospital).

3544. Fischer, E. *Aufgaben der Anthropologie, menschlichen Erblchkeitslehre und Eugenik*. (Problems in anthropology, human inheritance and eugenics.) *Naturwiss.*, 1926, 14, 749-755.—An address.—(Courtesy *Biological Abstracts*).

3545. Hammett, F. S. *Heredity concepts of the ancient Hindus*. *Scient. Mo.*, 1928, 452-455.—This article presents biological matter taken from the Müller edition of *Sacred Books of the East* for its historical value in relation to modern theories of eugenics. The ideas developed are those of straight-line descent, immortality through germ-plasm continuity, inherited disease, and dangers of inbreeding. Each is illustrated by quotations, as that the seed is more important in determining characteristics of the offspring than is the receptacle of the seed, or that "in thine offspring thou art born again, that, mortal, is thy immortality." There are careful directions about the physical characteristics of the wife to be chosen, and the prohibited degrees of relationship are within the seventh on the father's side and the fifth on the mother's. The author calls attention to the fact that not only is Weismann's principle of immortality through germplasm continuity anticipated, but also the idea of some modern biologists that a male child is born of a male germ; and he suggests that the Hindus' caste system may be largely an outgrowth of their concepts of heredity.—(Courtesy *Social Science Abstracts*).

3546. Little, C. C. *Opportunities for research in mammalian genetics*. *Scient. Mo.*, 1928, 26, 521-534.—Five groups of genetic problems are capable of successful investigation in laboratory mammals. These are: (1) size and growth; (2) fertility and sterility; (3) susceptibility or resistance to disease; (4) lethal action of the gene during development; and (5) psychological factors. The article presents a brief review of the work in each of these five fields. It then discusses them from the point of view of four general unanswered problems: (1) the permanence of genes; (2) the relation of soma to germ plasm; (3) the nature of the gene as shown by its activity during ontogeny; and (4) the possibility of producing genetic change by gradual action of various substances.—L. W. Gellermann (Clark).

3547. Mehta, S. T. *Laws of eugenics and the institution of marriage amongst Hindus*. *Man in India*, 1928, 8, 168-177.—The principles of the science known under the name of eugenics have been observed by the Hindus from Vedic times until now.

The Hindu's rule of marrying within his caste, the avoidance of marriage between relatives, near and distant, the custom of celibacy until a certain age, the laws forbidding marriage of sick people, the promotion of learning, and the sanitary prescriptions concerning food led to the propagation and perfection of the race. In fine, the marriages of clean, healthy, intelligent and virtuous couples have been regarded as the only producers of a great fit race.—(Courtesy *Social Science Abstracts*).

3548. Oberndorf, G. P. *Psycho-analysis of sibilings*. *Amer. J. Psychiat.*, 1929, 8, 1,007-1,020.—On the basis of the study of five sets of sibilings the following phenomena are noted: (1) the eclecticism of predominant individualistic attachments and reactions; (2) the perpetual mutability of family environment; (3) the adoption by and viability of the family's social outlook in all sibilings no matter which turn the Oedipus reaction may have assumed in them as individuals.—W. M. Rosebrook (Boston Psychopathic Hospital).

3549. Wilson, E. B. *Mendelian inheritance with assortive mating*. *Proc. Nat. Acad. Sci.*, 1928, 14, 137-140.—Tables for gametic and somatic inheritance of offspring from either parent and of somatic sibling correlation are given in terms of the assortive mating coefficient and the proportions of pure dominant, hybrid, and recessive in a population. Formulae are derived from these tables for the sibling correlation and for the correlation between parent and offspring. It is doubtful whether these formulae may be applied to measured values of the parental and sibling correlation coefficients in order to determine the assortive mating coefficient and the proportions of pure dominant, hybrid, and recessive in a population.—A. K. Kurtz (Ohio State).

[See also abstract 3648.]

#### SPECIAL MENTAL CONDITIONS

3550. Allers, R. *Wille und Erkenntnis in der Entwicklung und Beeinflussung des Charakters*. (Will and knowledge in the development of, and influence upon, character.) *Arch. f. Psychiat.*, 1928, 85, 479-497.—An understanding of character must start from an analysis of conduct, that is, from relations between "I" and "not-I." Conduct is purposive; purpose is the creation of a whole. This whole must have the mark of quality; conduct without value is not possible. Conduct is necessarily connected with tension between the values given at the start and those that can possibly be attained. The knowledge of this tension precedes action. The objective world opposing the person determines direction and form of conduct according to its own laws. Conduct is determined not by a particular quality of will but by the ability of the acting person to perceive the opposing world of values and to decline the known value. The perception of values by a person is to be characterized according to direction and range. General blindness of values is denied; only partial blindness of values, deception in the perception of values, is possible. Instinctive activ-

ity does not decide and unambiguously determine the formation of character. The instincts are directed towards pleasure; pleasure is not a primary aim, but is possible as an aim only as the bearer of a definite kind of values. The will cannot be derived from instincts; the aims of will and instinct are different. Will is choice between values; instinct demands; the characteristic qualities of choosing are lacking. Character can also be defined as the essence of the laws of the individual preference of values; these are cognized; the teaching of character is based primarily and ultimately on insight and not upon the doctrine of instincts, or their biological correlate, the constitution.—O. Graf (Munich).

3551. [Anon.] **Orthopsychiatry.** *Science*, 1929, 69, xiv.—Report of an address by K. A. Menninger before the American Orthopsychiatric Association. Personalities prone to failure, the changing of which is the psychiatrist's business, are classified as follows: the organically diseased, the stupid, the isolated, the asocial, the moody, the neurotic and the psychopathic.—R. R. Willoughby (Clark).

3552. Berggren, S., & Moberg, E. **Experimentelle Untersuchungen zum Problem des Schlafes.** (Experimental investigations on the sleep problem.) *Acta Psychiat. et Neur.*, 1929, 4, 1-35.—All research on sleep in regard to changes in respiration, secretion, metabolism, blood circulation, consistency of the blood, and especially changes in consciousness, make it reasonable to infer that all such changes may be traced to a central origin in the brain. On the basis of twenty-two experiments with animals the writers reach, among others, the following conclusions: An intercerebral injection of  $\text{CaCl}_2$  in doses .26-.62 mg. in isotonic solution of 20-48 cmm. produces somnolence or sleep in the cat when the injection is made in the nuclei infundibulares or nearby region, or in the nuclei hypothalamici of the tuber cinereum. An intercerebral injection of KCl in doses of .44-.55 mg. in isotonic solution of 38.4-57.8 cmm. produces somnolence or sleep in the cat when the injection is made in the neighborhood of the tuber cinereum. An intercerebral injection of .65 mg. KCl or .62 mg.  $\text{CaCl}_2$  in isotonic solution of about the same strength may have an opposite effect in the cat. A simple needle prick in the tuber cinereum or in a certain area behind it may produce sleep. The writers' investigations thus on the whole verify the results of Demole with  $\text{CaCl}_2$  but show that the effect is not conditioned by  $\text{CaCl}_2$  alone. Either  $\text{CaCl}_2$  or a simple lesion by a needle prick may produce the same results. The writers think that they have more accurately localized the center for sleep and that this is to be found in the nuclei infundibulares and the nuclei hypothalamici. The various experiments are reported in detail. Statistical tables and a cut of the injection syringe illustrate the text. Bibliography of 15 titles.—M. L. Reymert (Wittenberg).

3553. Dannemann, A. C. **Nervous and mental reactions to veronal: with report of a case of chronic veronal poisoning.** *J. Nerv. & Ment. Dis.*, 1929, 69, 33-52.—The veronal psychoses do not present any distinctive features of their own but re-

semble the acute toxic deliriod states of other toxic conditions. Mild cases may be mistaken for drunkenness or locomotor ataxia. Excessive use of veronal is the result rather than the cause of the individual's personality disorder. Bibliography.—R. A. Young (Boston Psychopathic Hospital).

3554. Darlington, H. S. **Tooth evulsion and circumcision.** *Psychoanal. Rev.*, 1929, 16, 272-290.—A parallel between the initiatory rite of circumcision, as practiced in some Australian tribes, and the rite of tooth extraction, as practised in other tribes, is pointed out, and a theory of circumcision considerably different from that of Freud is presented. Teeth and the male genital are both instruments of aggression. Circumcision at the time of coming to manhood symbolizes the uncovering and preparation of the instrument for use. Similarly with the teeth; a tooth is knocked out as a substitute for cutting away the lips. An additional significance lies in the rite as a symbol for the removal of the opposite sex element from a sexually neutral individual, leaving him completely masculine or completely feminine. The prepuce, or a tooth on the left side, is removed from a boy, while the clitoris, or a tooth on the right side, is removed from a girl. Various modifications and distortions of the rite as here presented occur among different tribes.—M. N. Crook (Clark).

3555. Fahrenkamp, K. **Was muss der praktische Arzt von der methodischen Psychotherapie wissen?** (What must the practising physician know of methodical psychotherapy?) *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1928, 1, 252-268.—It is pointed out that the practising physician is continually meeting conditions in which an organic disturbance is dependent in part upon an unsatisfactory personality adjustment. It is important that the physician be able to recognize and successfully cope with such conditions. A number of case histories are briefly described, illustrating the more common disorders involving both mental and physical conditions. Formerly the professional prestige and personality of the physician exercised a certain psychotherapeutic influence in such cases, but now the work of Freud offers a real basis for a systematic psychotherapy, so that it is possible to attack the fundamental trouble more directly. It is not necessary that every doctor be a trained psychiatrist, but it is important that every doctor be able to make correct diagnoses in the borderline cases he is continually confronted with.—M. N. Crook (Clark).

3556. Green, G. H. **The terror-dream.** New York: Dutton, 1929. Pp. 126. \$2.00.—See III: 241.—R. R. Willoughby (Clark).

3557. Häberlin, P. **Die Problematik des Charakters.** (The existence of problems in character.) *Arch. f. Psychiat.*, 1928, 85, 473-477.—The existence of problems in character rests on the presence of antagonistic directions in life; life's problems arise only through the painful and more or less clearly conscious perception of this antagonism. Lack of problems is called naivety; it does not mean the lack of existence of problems, but only lack of sensitivity for them. There are two kinds of inner antagonism

of character. (1) In regard to purposiveness; the individual's subjectivity, as oriented by his instincts, and his objectivity, or "spirituality," as oriented by moral, objective values, are incompatible opposites; they tend towards an unequivocal solution which seems essentially impossible. The effort to solve this insoluble discord, the effort to make the direction of life unambiguous is called the "moral life." (2) The contrast between the purposive ("moral") and the esthetic conduct; the peculiar character of the latter is the lack of purposiveness and of grappling with the object, the experience of existence as unity, as a state without problems. Here also no definite solution is possible but only an "either-or." The inferences for the pedagogy and therapy of the *Problematik* are as follows: It is impossible to disregard the existence of problems; we can at best do away with (not solve) them. There are several possibilities: (1) the blunting of the sensitivity for problems, "training for naivety"; but absolute naivety is a Utopia; (2) formation of bearable compromises which, however, are not lasting and, since compromises are not a solution, create a discomfort of further problems through a formation of the "inner censure"; a constantly renewed struggle for the disappearance of ambiguity without lasting compromises; the road of "normal progress," the historical road of progress in civilization. No real solution, but constant renewing of the conflict with moments of danger. Contrasted with these attempts, the religious way is a solution which does not discard the existence of problems but overcomes its suffering. All religious solutions see and recognize the impossibility of discarding the existence of problems; they seek for a deeper understanding, that is, they believe it justified, ordained for man. Life's problems become meaningful tasks, they lose their character of suffering, and lead to a higher naivety. Psychology and the science of character do not take part in it but merely determine these modes of conduct as empirical facts which are necessary for an understanding of the backgrounds of man.—O. Graf (Munich).

3558. Hall, W. S. *Love and marriage*. Philadelphia: Winston, 1929. Pp. vi + 367. \$2.00.—There are four parts to this volume. The first, *Mating, Love, Marriage*, is a philosophical treatment of such phenomena as the mating instinct, love, mating, marriage and its problems, and social ethics. The second, *The Woman*, presents a discussion of the chief characteristics and functions of womanhood. The third, *The Man*, discusses manhood. The fourth, *Hygiene*, discusses such topics as personal hygiene, family hygiene, birth control, social and race hygiene, eugenics, etc. The presentation is popular.—N. L. Munn (Clark).

3559. Hammett, F. S. *The conceptual psychology of the ancient Hindus*. *Psychoanal. Rev.*, 1929, 16, 291-311.—A study of the literal translations of ancient Hindu records as found in Müller's *Sacred Books of the East* shows that the ancient Hindus had an appreciation of many psychological concepts prevalent today. Many quotations from the literal

translations are presented, illustrating concepts in the fields of metaphysics, perception, emotions, psychopathology, etc. Several items of symbolic and psychoanalytic significance are pointed out. A list of detailed references is appended.—M. N. Crook (Clark).

3560. Heilig, R., & Hoff, H. *Psychische Beeinflussung von Organfunktionen, insbesondere in der Hypnose*. (The mental influencing of organic functions, especially in hypnosis.) *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1928, 1, 268-280.—It is pointed out that Pavlov's experiments on conditioned reflexes have shown that mental phenomena can influence somatic processes. A large amount of work is cited showing the influence of hypnotic suggestion in normal people on various physiological processes, among which are digestive secretions, metabolism, distribution of blood, and respiration. The familiar fact is pointed out that endocrine secretions and other vegetative functions are influenced by mental attitudes in non-hypnotic situations. These considerations, and also evidence from the use of drugs, suggest that such influence operates through a psycho-vegetative center which normally is quite restricted, but whose effective connections are extended by the removal of certain inhibitions under hypnosis or in a condition of neurosis. It is pointed out that for this reason there is little hope of curing a neurosis by merely treating the somatic symptoms. The bibliography contains about 70 titles.—M. N. Crook (Clark).

3561. Hendrick, I. *The analysis of personality*. *Amer. J. Psychiat.*, 1928, 8, 535-563.—A critical survey of 147 papers, most of which report experiments in rating or testing personality traits. These papers tend to discourage the notion that any satisfactory instrument for objective personality study has yet been devised. The technique of various personality tests is presented, as well as their reliability and validity. Bibliography.—W. M. Rosebrook (Boston Psychopathic Hospital).

3562. Herzberg, A. *Die Erotik in der Arzt-Patient-Beziehung*. (The erotic in the relation between physician and patient.) *Zsch. f. Sex.-wiss. u. Sex.-pol.*, 1929, 26, 96-105.—The article stresses the point that erotic behavior is not confined to neurotic patients, but may also be present in the behavior of a person who is physically ill. The first symptoms of erotic behavior fixation toward the physician are discussed. Dreams show the first traces. They are full of symbolism in which the doctor can be easily recognized. The patient's behavior toward his doctor changes. His manner of greeting as well as his jealousy of other patients are characteristic of this stage. He often attempts to lengthen the visits. The factors which favor the development of the attachment are discussed in detail. Not the least of these is the fact that the patient regards the doctor as one whom he can trust and can pour out his soul to him. The restraining factors are also discussed at length. The effects of erotic behavior in the treatment of the case are evaluated and the doctor's behavior during the

course of the treatment is outlined.—*H. S. Clapp* (Valhalla, N. Y.).

3563. **Kamiat, A. H.** The subjectivity of the believer. *Soc. Science*, 1929, 4, 217-221.—The presence of a delusion of infallibility is concealed from its possessor. Unknowingly engaged in the meshes of a fiction, the mind evaluates itself and its products in terms of that fiction. The subjective attitude of the believer makes self-analysis difficult, if not impossible. The believer's persistence in viewing his mind and its products from within his delusion of infallibility cooperates with his prejudices, his need for rationalizations, and his mental ills to make up the subjective attitude. An objective study of the psychogenesis of beliefs must be regarded as a task for the psychologist. The latter will erect a science of comparative belief, or comparative ideology. So impenetrable is the barrier erected by subjectivity that the most elementary comparative facts lose their significance for the believer. Either he fails to perceive, or else he discounts, the significance of the similarities subsisting between his psychology and that of dissenters. The subjectivity is a matter of the self evaluating itself in terms of the fantasy of the idealized self. The partisan's intellectual criteria of truth themselves constitute a part of his fiction. A revealing phenomenon is the tendency toward the supercilious classification of differing ideas by means of forceful nouns and adjectives (buncombe, nonsense, vicious, idiotic). The denouncer thus betrays a strong affect-attitude toward the ideas in question. His vitriolic language serves to illumine, not the issues under discussion, but the character of his mental reaction to the opposition. He is thus guilty of a failure to observe a distinction between the inner and outer worlds; he employs his denunciatory terms as if they were indicative of qualities inherent in the opinions he assaults.—*A. H. Kamiat* (Brooklyn, N. Y.).

3564. **Kauders, O.** Die prospektive Tendenz in der Psychotherapie. (The forward-looking tendency in psychotherapy.) *Arch. f. Psychiat.*, 1928, 85, 462-472.—Psychoanalysis and individual psychology are largely retrospectively oriented ways of understanding the nervously diseased human being. This view is justified and also necessary for therapy, since symptoms of disease must be interpreted by means of the past; the neurotically unintelligible must be interpreted rationally. Retrospection is only a starting point. The essential difference between psychoanalysis and individual psychology is as follows: Psychoanalysis is satisfied with bringing into awareness the unconscious root; individual psychology stands for prospective reeducation, for adaptation to the community, to tasks of present and future. The special character of individual psychology is discussed in regard to the consummation of this aim and the practical accomplishment of the forward-looking orientation.—*O. Graf* (Munich).

3565. **Kent, R. A.** The growing recognition of character education as a community responsibility. *Rel. Educ.*, 1929, 24, 401-407.—Among movements that have a bearing upon moral education may be

mentioned: (1) that which emphasizes the individuality of the child and its ascendant value as distinct from its social obligation; (2) the attempt to keep pace with the rapid economic and social changes and find a secure footing for the developing individual; (3) a movement which comes virtually as a command that public education shall assume definite responsibility for character education; (4) the method of seeking facts pertinent to the problem, called the scientific movement.—*J. P. Hylan* (Stoneham, Mass.).

3566. **Kretschmer, E.** Die Temperamente. (The temperaments.) *Scientia*, 1929, 45, 387-394.—A classification of temperaments into cyclothymic and schizothymic, each with three subdivisions. The various types are described and contrasted physically, psychologically (response to various tests) and psychopathologically. Physique is considered as very closely related to temperament.—*R. G. Sherwood* (Stillwater, Minn.).

3567. **Kroll, S.** Kritik der Pikanterie. (Criticism of piquancy.) *Zsch. f. Sex.-wiss. u. Sex.-pol.*, 1929, 26, 112-133.—The purpose of this psychological study of piquancy is to throw light from as many sides as possible and to stress the part played by piquancy in sex. Modern life is saturated with piquancy. When one leaves the field of culinary art the term piquancy characterizes the erotic and sensational. Its effect is to produce sexual excitement. Every type of piquancy has an evil tang. It sets free sexual associations. The sense of taste, except for abnormal people, has only culinary piquancy. The following order is listed according to degree of piquancy in the remaining senses: first visual, then auditory, tactual and olfactory. The author treats at length the various categories into which piquancy falls. In the field of sight there are several degrees noted. The least intense degree of piquancy is produced by the printed word; next lowest comes sketches; photographs are more intense in degree of piquancy, but are outclassed by the cinema and the stage. Real life produces the most intense degree.—*H. S. Clapp* (Valhalla, N. Y.).

3568. **Künkel, F.** Vom Schuldgefühl zum Schuld-bewusstsein. Ein Fall aus der psychotherapeutischen Praxis. (From the feeling of guilt to a consciousness of guilt. A case from psychotherapeutic practice.) *Zsch. f. Religionspsychol.*, 1929, 2, 5-28.—It is obvious from the investigations made in the last decade that one should not try to differentiate between normal and abnormal character. For this reason the theologian must now define guilt so that "even the idiot child of syphilitic parents with all his 'guiltless' suffering does not give the lie to this concept of guilt." On the other hand the doctor, too, faces correspondingly new problems. This psychotherapy stands at the intersection of medicine and theology. Only the future will clarify the details of the work done by these two faculties. But the most important presupposition for their co-operation must be the mutual respect of scientific autonomy. To the section presenting the scientific position Künkel adds the case history of a patient who had a general feeling of guilt from which a mass

of problems immediately resulted, especially "lacunae in the system of psychological concepts" and the problem of guilt and causality. The former appears when the patient rejects self-redemption and then asks "Who then will help me?" This shows the necessity of separating the scientific and religious questions, the question of causality from that of responsibility. The direction of the investigation would be wrong if we give the same importance to the question "Who is guilty?" as to the question "What is the cause?" It is true that the patient is responsible for his character and for the result. Knowledge of the causes will relieve him. But it also forces him to be responsible, since he can now see his future in their conditions and possibilities. This separation of the study of causality and the problem of responsibility Künkel calls the tongs of fate (*Schicksalszange*).—A. Römer (Leipzig).

3569. Landauer, K. Zur psychosexuellen Genese der Dummheit. (The psychosexual genesis of ignorance [of sex].) *Zsch. f. Sex.-wiss. u. Sex.-pol.*, 1929, 26, 87-96.—In the preceding articles on this subject the author has been concerned with the reasons why the so-called "stupid" child does not ask questions. He has analyzed typical cases of "stupidity" and reaches the conclusion that stupidity is the most frequent neurosis. By "stupidity" the author means ignorance of sex knowledge. It arises most frequently from the fact that the child ceases to ask questions concerning his origin and sex because he realizes it pleases his parents for him to be ignorant of such facts. He shuts himself off from reality and does not permit himself to see anything in his parents' behavior that does not fit into his concept of the ideal parent. Such a parent is one who does not lie and is not concerned with matters of sex. The model child is another type who frequently develops neuroses. Another contributing factor of great importance is the fear of castration. "Stupidity" in the sense meant by the author is a form of the discharge of hatred which arises from the Oedipus complex.—H. S. Clapp (Valhalla, N. Y.).

3570. Landry, L. Les notions de secousse et de vitesse. (The concepts of shock and celerity.) *J. de psychol.*, 1929, 26, 251-252.—The author takes exception to Melchior's use of the word *secousse*, which seems to him to have been confused with *choc*.—N. L. Munn (Clark).

3571. Lasswell, H. D. The problem of adequate personality records: a proposal. *Amer. J. Psychiat.*, 1929, 8, 1,057-1,066.—A detailed suggestion for an outline to be followed in the study of a personality.—W. M. Rosebrook (Boston Psychopathic Hospital).

3572. Lewin, K. Die Entwicklung der experimentellen Willens- und Affektpsychologie und die Psychotherapie. (The development of the experimental psychology of will and emotion and psychotherapy.) *Arch. f. Psychiat.*, 1928, 85, 515-537.—Psychotherapy often disregards the experimental-psychological investigations of higher mental life. This disregard is intelligible on account of the wrong attitude of the old psychology. However, the experimental way is possible and necessary also for in-

vestigation of the higher mental life, although it is not the only way. Results of the newer researches in will and emotion are discussed, strength of will and habit, factors of will and instinct, and different aspects of action (the resumption of interrupted actions, the memory of finished and unfinished actions, satisfaction). The author tries to find the connections between experimental investigations and the theories of Freud and Adler.—O. Graf (Munich).

3573. Lowrey, L. The study of personality. *Amer. J. Psychiat.*, 1929, 8, 695-703.—A "statement of some of the difficulties and some of the loose thinking which have kept us from coming to a clearer conception concerning personality." Suggestions are given in the form of an outline as an aid in the study of a personality.—W. M. Rosebrook (Boston Psychopathic Hospital).

3574. Meyer, E. Beiträge zum Sexualleben der Landjugend. (Contributions to the study of sex life of rural youth.) *Zsch. f. Sex.-wiss. u. Sex.-pol.*, 1929, 26, 106-111.—There is no ground for being concerned about the morals of country youth as far as the problem concerns the country youth of northern Germany, who have not been influenced by the big cities. Conditions become worse under the influence of the cities and industry. On the other hand, there are no grounds for creating illusions about their innocence. They see the part nature plays in sex life and could teach the city youth. Country youth is less promiscuous than city youth.—H. S. Clapp (Valhalla, N. Y.).

3575. Morgan, J. J. B. A clinical view of factors involved in personal adjustment. *Rel. Educ.*, 1929, 24, 428-436.—This discussion is based on experience gained through a period of nearly four years at the Northwestern Psychological Clinic, where over a thousand persons, mostly children, were brought because of difficulties in school or anti-social conduct. Methods of analysis and treatment of these difficulties are presented. The nature and origin of attitudes and the way of discovering and changing them are discussed and illustrated.—J. P. Hyland (Stoneham, Mass.).

3576. Pearson, G. H. J. An interpretative study of involuntional depression. *Amer. J. Psychiat.*, 1928, 8, 289-335.—A study of four cases of depression. A precipitating situation in which the ego is wounded and the acquired compensations fail is given as the mechanism behind the attack. The psychosis is seen as a refuge in which one can give full play to his infantile hate against ego-ideal and inhibitions. This increases his guilt, so he punishes his ego for its subordination of the ego-ideal. Bibliography.—W. M. Rosebrook (Boston Psychopathic Hospital).

3577. Peck, M. W. Psychoanalysis. *Occup. Therap. & Rehab.*, 1929, 8, 177-184.—Two aspects of psychoanalysis are to be distinguished—a system of psychology and a method of treatment. In the former as involved in the neuroses four points are emphasized: (1) the difficulties are largely unconscious; (2) mental conflict plays a considerable rôle; (3) repression mechanisms are often present; (4)

compromises between conflict and repression or various other outlets constitute the main symptoms. Psychoanalysis as a treatment takes the patient back mentally to the scene of his unconscious conflict and brings the details to the surface. There is a searching autobiography and a bringing out of the emotional patterns laid down in childhood. The patient does most of the talking.—*H. E. Burt* (Ohio State).

3578. **Polen, L.** "Körperbau und Charakter." *Darstellung und kritische Würdigung der Kretschmerschen Untersuchung.* ("Physique and character." Exposition and critical evaluation of Kretschmer's investigation.) *Arch. f. d. ges. Psychol.*, 1928, 66, 1-116.—This monograph presents a summary of Kretschmer's teaching as contained in his *Körperbau und Charakter und Medizinische Psychologie*. A critical evaluation follows, taking into consideration the results of many workers in this field who have confirmed as well as repudiated certain aspects of his theory. The bodily types proposed by him seem to exist, although it is not possible to compare directly Kretschmer's observations and those of others. There are very few pure types and many mixed ones which give rise to much arbitrariness in classification. These types are not definitely determined by sex, age, or environment; they are not the same as racial types. The question of the relationship between physique and psychosis cannot be settled definitely as yet. It appears that there is a close affinity between the pyknic type and the cyclothymic psychoses. The existence of mental types in Kretschmer's sense can be considered established.—*K. F. Muenzinger* (Colorado).

3579. **Prinzhorn, H.** *Medezin und Persönlichkeitsforschung.* (Medicine and the study of personality.) *Zsch. f. Menschenkd.*, 1929, 4, 345-351.—*A. Römer* (Leipzig).

3580. **Riese, W.** *Die Unfallneurose als Problem der Gegenwartsmedizin. Voraussetzungen und Grundlagen ihrer Beurteilung, Begutachtung und Behandlung.* (The accident neurosis as a problem of present-day medicine. Premises and foundations of its examination, the giving of expert testimony in regard to it, and its therapy.) Pp. 261. M. 8.50.—The editor, who has labored for several years and with growing success to effect new points of view in the giving of expert testimony in regard to nervous and psychological sequels of accidents, is guiding the scientific counter-movement against the so-called "ruling" doctrine into a unified path through this collective work. The legal foundations of the subject are treated by an expert jurist (Wittgenstein, Dresden); a new decision by the Federal Insurance Office and the wrong and superficial thinking on which it is based are commented upon (Walther Riese, Frankfurt a.M.); the peculiarity of the relation of the physician to the occurrence of the accident (Honigmann, Giessen) and to the patient (Walther Riese, Frankfurt a.M.) is analyzed; the accident neurosis is examined in regard to its nature as a disease (Fränkel, Berlin); the psychology and—perhaps for the first time—the psychoanalysis of the accident neurosis are thoroughly examined (Landauer,

Frankfurt a.M.; Meng, Frankfurt a.M.; Sperling, Vienna); the accident neurosis is considered and evaluated in its significance as a sociological (Hertha Riese, Frankfurt a.M.) and social-psychological phenomenon (Levy-Suhl, Berlin). The thorough presentation of the accident neurosis under sociological conditions quite different from the German ones (Rosenstein, Moscow) brings new and important proofs to oppose the common, superficial opinion in Germany that the sole fact of social insurance is the decisive factor in the genesis of nervous sequels of accidents. On the contrary, it is shown by striking examples that the insurance companies, especially the private ones, and their medical advisors lack the necessary objectivity in regard to the patient when they come to treat this question. On the basis of a model example of expert testimony the whole problem is illustrated in detail by the greatest neurological authority of our time (von Monakow, Zürich) and the therapy of the accident neurosis is discussed (Eliasberg, Munich). In a postscript by the editor, guiding lines are presented for the giving of expert testimony in the future.—*W. Riese* (Frankfurt a.M.).

3581. **Roman, E.** *Psicologia de la vida erótica.* (Psychology of the love life.) *Criterion*, 1929, 6, 181-204.—The author dwells upon some of the aspects of the Freudian theories regarding the psychology of the love life. It is also indicated that any acceptance of these theories is incompatible with Christianity and the social order.—*J. W. Nagge* (Harvard).

3582. **Sapir, E.** *Observations on the sex problem in America.* *Amer. J. Psychiat.*, 1928, 8, 519-534.—America tends to be both realistic and conservative in the matter of sex. It is coming to be generally recognized that psychological health demands sex satisfaction at a much earlier period than the general postponement of marriage makes possible. The author does not believe that America will be a docile pupil of Europe. That new institutions of an erotic and marital nature are slowly maturing is obvious. However, it is no less obvious that these institutions will not mean a surrender to license, but will have for their object the saving of love and the perpetuation of romantic intimacy and the ideal of fidelity by those who are capable of this intimacy.—*W. M. Rosebrook* (Boston Psychopathic Hospital).

3583. **Schilder, P.** *Die Problematik der Individualpsychologie.* (The problematical foundation of individual psychology.) *Arch. f. Psychiat.*, 1928, 85, 443-447.—The author desires to see how individual psychology fits into the system of general psychology. There is a critical discussion with Adler about the discarding of the concept of instinct, and the too great narrowness of the so-called "feelings of community" which do not do justice to all motives for the guiding line. Adler is said further to deny the fundamental differences between individuals, whereby he foregoes a real science of character. The author also touches on psychological levels of development, organic inferiority, constitution, and psychological connections. Individual psychology is essentially inadequate in its turning away from the

concept of instincts; it emphasizes too much the rational side of mental life; with sides of his life that are far beyond this one, living man turns to the emotions, the instincts, the "heart of the world."—O. Graf (Munich).

3584. **Schultz-Hencke, H.** *Die heutigen Aufgaben der Psychotherapie als Wissenschaft.* (The present problems of psychotherapy as a science.) *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1928, 1, 238-252.—Psychotherapy is now attaining the stage at which its results can show some statistical validity. The three types of treatment—psychoanalysis, simple suggestion, and internal medicine—may all show results in the same kind of cases, but psychoanalysis is the only one which rests upon a valid psychological foundation. It is important that the material contributed by psychoanalysis be amplified and organized, and that psychoanalysis be applied in the large per cent. of cases which are not amenable to suggestion therapy.—M. N. Crook (Clark).

3585. **Schultz-Henke, H.** *Psychoanalyse und Individualpsychologie.* (Psychoanalysis and individual psychology.) *Arch. f. Psychiat.*, 1928, 85, 437-442.—Written from the point of view of psychoanalysis. The two are not opposites; psychoanalysis is the more inclusive, individual psychology the narrower, part of psychoanalysis. The concepts of the origin of symptoms, especially, are too narrow. Individual psychology is occupied too little with primitive, primary instinctive experiences, and consequently over-estimates the secondary phases of instinctive experiences and thereby limits the therapeutic possibilities. Sometimes it is absolutely necessary to develop primary instinctive experiences, as well as the attainment of renunciation of their secondary effects. Only psychoanalysis makes possible an understanding of the last depths of a neurosis.—O. Graf (Munich).

3586. **Schwarz, O.** *Leistung oder Symptom?* (Accomplishment or symptom?) *Arch. f. Psychiat.*, 1928, 85, 497-514.—Scientific psychology cannot be a sufficient basis for psychotherapy, because it does not have a "theory of values" in the real sense of the term; the occasion for psychotherapy is always a conflict of values; psychotherapy needs a theory of values. The question raised in the title can be shown in three problems of psychotherapy. (1) Diagnosis of character: of the chief practices of characterology, individual psychology and psychoanalysis, the latter is fundamentally blind to values, it sees only the attainment of values, not their contents; the former knows only the community of values and its negative, the striving for values. (2) The penetration of the neurosis: individual psychology considers every action as a symptom, but the neurotic also produces real accomplishments. (3) Therapy: the aim must be to make the patient receptive for the perception of objective and absolutely valid values, such as "genuineness of motivation" and "truthfulness in reference to the objective world."—O. Graf (Munich).

3587. **Seif, L.** *Individualpsychologie und Psychotherapie.* (Individual psychology and psychotherapy.) *Arch. f. Psychiat.*, 1928, 85, 425-436.—

Adler's individual psychology is an attempt at a correct attitude towards the unrelenting "logic of life." In place of the usual partial view of the human person it puts the standpoint of the total view, and thereby makes possible an understanding of the seemingly contradictory, but in reality unitary, purposive individual. The foundation is the fundamental characterological attitude of the individual, objective or personal (egocentric). This attitude determines an inseparable relationship of compensation between feelings of inferiority and striving towards value. The sources of the increase of the sense of inferiority are irrelevant behavior of the environment, organic inferiority, prejudices of aptitude and inheritance, children's erroneous valuation of self and environment. A neurosis is a disturbance of the social relations between human beings, a justification of the egocentric person in regard to his escape from life's task. Its therapy consists of the reeducation of the personality, adaptation to the life situation, change of the egocentric attitude into one directed towards reality. The best prophylaxis of a neurosis is a correct, objective (*sachlich*) education of the child for life and its tasks, a course possible only through "education of the educators."—O. Graf (Munich).

3588. **Speer, E.** *Das fiktive Ziel der Individualpsychologie.* (The assumed aim of individual psychology.) *Arch. f. Psychiat.*, 1928, 85, 458-461.—The aim of psychotherapy must be to attain the unity of the individual, a mental balance, which means mental health. The aim is not only a medical one but also one of *Weltanschauung*. This will touch questions of the religious *Weltanschauungen*. By way of experiences of conversion it is shown that the psychology of religion and medical psychology are very close to each other. Yet there are points of danger for psychotherapy; both must be kept apart. The difference is largely in that psychotherapy is striving for a unity of personality according to its own aims, while religion is impressing with a ready-made die an exogenic character of personality, a pseudo-unity; psychotherapy works with single souls, the church must use mass psychology. Psychotherapy must guard itself against this; problems of the community belong in the field of mental hygiene, where, of course, psychotherapy has also some scope. Clarifying and delimiting the "neighborhood of religion" does not mean refusal and enmity.—O. Graf (Munich).

3589. **Ten Cate, J.** *Het probleem van den slaap.* (The problem of sleep.) *Mensch en Maatschappij*, 1929, 5, 304-320.—The writer concludes with Bunge, after experimental comparison with the lower animals, that sleep depends upon the development of the cerebrum; a man sleeps less than a dog, but the sleep of a man can be deeper. Sleep is a complicated biological condition, which is characterized by the lessening of the general life-expression of the organism. The objective symptoms (e.g., heart action, inhalation, etc.) are discussed, after which the author takes up the characteristic changes of the functions of the central nervous system. The conditions of the

origin of the state of sleep in normal circumstances, together with the functional connection of this phenomenon with the changes in the central nervous system, based on the latest investigations of Pavlov with dogs, are discussed. Pavlov's experiments lead the author to believe that the sleep of man rests on an inhibition process which originates in the cortex of the cerebrum, and from this point may spread out over the subcortical centers. Though not a complete and decisive solution of the problem of sleep, the author regards the investigations of Pavlov as a great step in that direction. Since the cortex of the cerebrum, the seat of psychic life, is most subject to external stimulation, it is reasonable to suppose that precisely here, under normal conditions, the inhibition process originates. The origin of sleep must be localized in the central nervous system. Though all somatic changes which can be observed during sleep are brought about directly or indirectly through the processes in the central nervous system, yet it is a well-known fact that the functions of the central nervous system are in large measure influenced by the somatic processes. Yet it is not only the different *incretina* which reach the central nervous system through the blood which are of importance in producing sleep. Modern investigation has pointed out that the organic constituents of the blood are of great significance. Experiments are detailed. Bibliography.—*H. Hospers* (Western Theological Seminary).

3590. Terry, G. C. A study in psycho-dynamic patterns. *Amer. J. Psychiat.*, 1929, 8, 881-899.—The study is based on one hundred cases of women described in *A Research in Marriage* by G. V. Hamilton. They are subdivided into: Group A, cases of women who had been victims of an incestuous aggression during the prepubertal or pubertal period; Group B, cases of women in which no pathological features were indicated; and Group Y, the whole number of cases. Group A presents the largest per cent incapable of a wholesome adjustment to marriage.—*W. M. Rosebrook* (Boston Psychopathic Hospital).

3591. Thomas, J. E., & Kuntz, A. A study of the vago-enteric mechanism by means of nicotin. *Amer. J. Physiol.*, 1926, 76, 598-605.—The observation by Bayliss and Starling that small doses of nicotin cause a loss of the effects of vagus stimulation on the small intestine in dogs is confirmed. However, if nicotin is given in gradually increasing doses the loss of vagus function is only temporary and is fully re-established when 25-50 mgm. per kgm. have been administered. After still larger doses the response of the intestine to vagus stimulation becomes greater than before nicotin was given. The view is proposed that the temporary loss of vagus function is not due to paralysis of the vagus mechanism but is a manifestation of inhibition. The possible functional arrangements of the intestinal-vagus mechanism permitting of such inhibitory phenomena are discussed. The arrangement which appears to be most in harmony with the available data comprises local reflex arcs in the myenteric plexus, with the vagus fibers acting as association pathways between the

central nervous system and local reflex centers in the intestine.—*J. E. Thomas* (Courtesy *Biological Abstracts*).

3592. von Stern, M. R. *Theorie des Unbewussten*. (Theory of the unconscious.) Linz a/D: F. Steurer, 1929. Pp. 120. M. 6.60.—In his "world-vacuum" theory the author disputes the real existence of what we are accustomed to call "space" and "time" from astrophysical as well as purely metaphysical points of view, defining the former as "disposition of the extension and movement of bodies" and the latter as the "rhythmical principle of movement." In the present work he demonstrates the identity of the unconscious with the unconditioned, which is thus raised from the sphere of inactive condition, which it surpasses by far, to the sphere of originating conditions; from the sphere of the accidental, to which the conscious is also allotted, to the sphere of substance. This argument is advanced not only on a theoretical basis, but receives practical confirmation in its application to the life of the individual, state and society. The unconscious accordingly appears no longer as an accidental "state" of things and individuals, but as the original creative power pervading all their accidents (not adhering to them), including the individual consciousness and being nourished from its hidden source, to take it up at last again into itself. In the analysis of the numerical transformation in collective consciousness in the life of the state and of society, which can be considered as a prototype of the change into cosmic omniscience, the fact is particularly emphasized that no contradiction, but only a gradual differentiation, exists between conscious and unconscious.—*M. R. von Stern* (Höflein).

3593. Walleczek, F. *Warum träumt man? Beschreibung und Erklärung des Traumvorganges*. (Why does one dream? Description and explanation of the process of dreaming.) *Arch. f. d. ges. Psychol.*, 1928, 66, 257-356.—The author analyzes almost a hundred dreams of old and young persons and arrives at the conclusion that dreams originate from definite physical conditions. He thinks it is possible in many cases to indicate the type of dreams after a person's health condition has been ascertained. Thus vertigo in dreams occurs with cardiac disease and flying with a nasal cold.—*K. F. Muenzinger* (Colorado).

3594. Warthin, A. S. *Old age, the major involution*. New York: Hoeber, 1929. Pp. ix + 198. \$3.00.—The author conceives of old age as a normal process of involution, physiologic and not pathologic in character. The book is presented as a foundation upon which may be built a working philosophy of life, essentially rational, but at the same time satisfying and optimistic. A brief discussion of the various stages in the development of the human organism from conception to maturity precedes the major part of the work—the treatment of the processes of old age as a normal biologic phenomenon, which is similar in essentials to many involutionary processes which take place at various times during the life of the organism, e.g., the involution of the placenta, of the

thymus gland, tonsils, milk teeth, etc., all of which go through a stage of senescence and then disappear when they are no longer useful. Senescence, the major involution, involving the whole organism, takes place for the good of the species, while the minor involutions take place for the good of the individual. The anatomic and physiologic changes taking place during senescence are discussed; the concluding chapter is *A Philosophy of Age*.—D. E. Johanssen (Wellesley).

3595. Weinmann, K. *Prophylaxie der Neurosen und ihre Beziehung zur psychischen Hygiene*. (Prophylaxis of the neurosis and its relation to mental hygiene.) *Arch. f. Psychiat.*, 1928, 85, 447-457. —Neuroses are false reactions of the individual in his attitude towards himself and his environment, the conditions of which are partly individual, and partly environmental. There are three points of attack for prophylaxis of neuroses: (1) Eugenics, advice to married people in the sense of racial hygiene, but also preparation for the choice of the right mate by means of individual psychology. (2) Susceptibility to the factor of environment, the right place of the child in the family. (3) Avoidance of the genesis and fixation of one's own weakness by a correct attitude towards the self; attainment and maintenance of the feeling of one's own value. These three points are made clear by examples, and inferences are drawn for mental hygiene, especially for education.—O. Graf (Munich).

3596. Wittels, F. *Some remarks on kleptomania*. *J. Nerv. & Ment. Dis.*, 1929, 69, 241-251.—A discussion of several cases of kleptomania from a psychoanalytical viewpoint.—R. A. Young (Boston Psychopathic Hospital).

[See also abstracts 3548, 3601, 3624, 3627, 3631, 3649, 3654, 3708, 3752, 3776, 3784, 3785, 3791, 3828, 3834, 3835, 3836, 3846, 3850, 3855.]

#### NERVOUS AND MENTAL DISORDERS

3597. Alford, L. B. *Epilepsy and dementia praecox considered as types of abiotrophy*. *J. Nerv. & Ment. Dis.*, 1928, 68, 594-601.—The author puts forth the hypothesis that the pathological progress in both dementia praecox and epilepsy is abiotrophy. Huntington's chorea is taken as the analogy for both. The deterioration of epilepsy and the mental disturbances of dementia praecox are instanced as the signs of the degenerative process affecting probably some of the structures at the base of the brain.—R. A. Young (Boston Psychopathic Hospital).

3598. Ayyar, K. V. *Chathan: a devil or a disease?* *Man*, 1928, 28, 153-159.—The article relates the havoc created in a family in Calicut, India, by the antics of a Chathan, one of twelve brothers, regarded in South Indian demonology as the imps of mischief. Despite all precautions, invocations, insignia, etc., he persisted in befouling food, house and person with filth, acts of incendiarism, and general destructiveness. He was finally expelled by a member of a certain family of low caste, reputed to have power over such demons. The incident is not uncommon among

the people of South India, and generally the acts are traced to some person who bears a grudge or who is mentally incompetent. In this case, however, the writer vouches for the integrity of the members of the afflicted family, and the period of terror and annoyance remains unexplained.—(Courtesy *Social Science Abstracts*).

3559. Ball, C. R. *A consideration of the acute psychoses as reaction types*. *Amer. J. Psychiat.*, 1928, 8, 479-491.—The term "reaction type" marks a new era in functional nervous and mental diseases. It is a transition from the era of description and differentiation to that of understanding. In conclusion the author makes the following points: (1) the acute psychoses are considered as reaction types, the reaction occurring on the constitutional basis of the susceptibility of certain brain mechanisms to systemic toxic conditions; (2) personality is to be regarded only as influencing the type of psychosis; (3) the rôle inheritance plays in mental and nervous affections should not be judged entirely from nervous manifestations, but allergic reactions in general should receive more consideration because of their very probable nervous origin; and (4) the exciting cause may be either psychic, physical, or both.—W. M. Rosebrook (Boston Psychopathic Hospital).

3600. Bowman, K., & Raymond, A. F. *Physical findings in schizophrenia*. *Amer. J. Psychiat.*, 1929, 8, 901-913.—The study is based on 1,196 cases of schizophrenia, the entire number of first admissions to the Boston Psychopathic Hospital for the four-year period, 1923-1926, inclusive. As controls, 836 cases of manic-depressive insanity and 412 cases of general paresis were used (total number of first admissions of these two psychoses during same period). General conclusions are: (1) physical findings in schizophrenia are essentially the same as in manic-depressive insanity, whereas both differ significantly from general paresis; (2) leucocytosis is a frequent finding in all three types; (3) alcoholism is infrequent in schizophrenic and affective disorders, but is more common in general paresis; (4) pregnancies, births and living children are fewer among cases of schizophrenia.—W. M. Rosebrook (Boston Psychopathic Hospital).

3601. Brill, A. A. *The application of psychoanalysis to psychiatry*. *J. Nerv. & Ment. Dis.*, 1928, 68, 561-577.—Cases given to illustrate the various stages in the development of the application of psychoanalysis to psychiatry.—R. A. Young (Boston Psychopathic Hospital).

3602. Brock, S. *Idiopathic narcolepsy, cataplexia and catalepsy associated with an unusual hallucination: a case report*. *J. Nerv. & Ment. Dis.*, 1928, 68, 583-590.—The case reported has the typical sleeping and emotional attacks and in addition a complete flaccid paralysis on awakening from a narcoleptic attack. Associated with the paralysis is a fairly uniform type of visual and auditory hallucination. References.—R. A. Young (Boston Psychopathic Hospital).

3603. David de Sanson, R. Labyrinthitis. (Labyrinthitis.) *Rev. oto.-neur.-ofal.*, 1929, 4, 204-216.—The author reviews the important contributions made to the etiology of the diseases of the labyrinths, especially stressing the disease of Ménière.—J. W. Nagge (Harvard).

3604. de Boer, P. De imbecillen in school en maatschappij. (The feeble-minded in school and society.) *Jeugd en Beroep*, 1928, 1, 122-126.—A discussion of some of the successful efforts being made to fit the feeble-minded for some kind of labor in order that the asylums and other institutions may not be overburdened. Those cared for in homes find work for a part of the day. In this way the feeble-minded are made to feel they are useful members of society.—E. Winter (Holland, Mich.).

3605. de Boer, P. De arbeidsgeschiktheid van zwakzinnigen. (The fitness for labor of the feeble-minded.) *Jeugd en Beroep*, 1928, 1, 155-160.—In respect to the industrial adjustment of the feeble-minded, it has been established: (1) that they are fit, in general, for labor which requires at the most a small complex of simple manual methods; (2) that this work needs to be taught them; (3) that they are serviceable only when they perform their work under supervision; (4) that they are not trustworthy of labor-expression; (5) that the amount of their labor is not stable; (6) that the speed of their labor varies greatly from and diminishes with that of the normal-minded.—H. Hospers (Western Theological Seminary).

3606. Dixon, R. L. Proposed research in epilepsy. *Amer. J. Psychiat.*, 1929, 8, 1,067-1,070.—A plea for a research laboratory in every state institution for epileptics.—W. M. Rosebrook (Boston Psychopathic Hospital).

3607. Ebaugh, F. G. Educational possibilities of a state psychopathic hospital. *Amer. J. Psychiat.*, 1928, 8, 443-455.—The educational possibilities are of two types: (1) intra-mural, which includes adequate teaching of medical students, conferences with relatives, education through discharged patients, and consultation service between psychiatry and other fields of medicine; (2) extra-mural, in which further contacts with the court and legal profession should be made, and the traveling clinic used.—W. M. Rosebrook (Boston Psychopathic Hospital).

3608. Eisenberg, W. Endokrine Störungen bei Schwachsinnigen. (Endocrine disorders in the feeble-minded.) *Zsch. f. Kinderforsch.*, 1929, 35, 373-405.—The author has investigated the feeble-minded in Hephata, near Treysa, for disorders of internal secretion. He tested these secretions by capillary microscopy. Among the total of 498 feeble-minded, 145 (29%) had endocrine disorders. These cases were divided almost equally between the sexes, 28.5% of the 196 female feeble-minded and 29% of the males being included. The author admits that the field of capillary microscopy has not yet been determined. He was able to investigate 135 feeble-minded with it and found only 20 with a normal capillary picture. Eisenberg believes that he may assume that relations obtain between capillary

inhibition and endocrine disorders. He agrees with W. Jaensch in the opinion that general psychophysical inhibition of development as well as endocrine disturbance is dependent upon the mid-brain, especially upon the regio hypothalamica.—O. Seeling (Berlin).

3609. Ewald, G. Endogene und reaktive Verstimmungszustände in der Sprechstunde. Ihre Erkennung und ihre Therapie. (Endogenous and reactive conditions of depression in the consultation hour. Their recognition and therapy.) *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1929, 2, 282-296.—One of the most fundamental problems of psychotherapy is to determine its boundaries, especially the extent of its problems within the more endogenous conditions of depression. Such conditions make up approximately 30% of the private consultations. The doctor must discover the cause of endogenous depression, which may be in a single repressed event in the patient's life, but more commonly arises from a long-continued chain of experiences. The fundamental differences between a person of the constitutional depressive type (manic-depressive insanity) and the reactive depressive type are given, with a brief discussion of the "mixed" type. The difficulties arising due to the characteristic tone of the depressive condition are felt to lie most frequently in the direction of the psychogenic (hysteric); not infrequently compulsive neuroses also arise, the theory of a manic-depressive basis for all compulsions being well-founded. The author reports that in his practice (contrary to Lange's point of view) the person who suffers from a strong depression reaches that state by degrees. In this continuation of the article the relation between depression and schizophrenia will be considered.—D. E. Johannsen (Wellesley).

3610. Fay, T. Mechanical theory of epilepsy. *Amer. J. Psychiat.*, 1929, 8, 783-836.—The paper "is specifically concerned with the behavior and significance of accumulations of subarachnoid fluid and cortical edema. The relation of this factor to the convulsive state, and the results of limitation of fluid intake, producing dehydration, are given detailed consideration." The author formulates the general conclusion that "our knowledge is too inadequate on many of the fundamental points involved to permit of more than the assumption that dehydration which has yielded certain results in those cases where it has been established may find a wider application in the convulsive states as a whole." Photographic X-ray plates. Bibliography.—W. M. Rosebrook (Boston Psychopathic Hospital).

3611. Freeman, W. Biometrical studies in psychiatry. *Amer. J. Psychiat.*, 1928, 8, 425-441.—The study is based upon the cases of about 1,100 psychotic patients coming to necropsy in the past ten years. Figures are presented to show graphically what has always been recognized, namely, that individuals in their susceptibility to disease vary according to their psychological responses. Prevention methods, morbidity, and mortality are discussed.—W. M. Rosebrook (Boston Psychopathic Hospital).

3612. Gaup, R. Über die Geschlechtsunterschiede bei Psychosen und ihre Bedeutung für eine vergleichende Psychologie der Geschlechter. (Concerning sex differences in psychoses and their significance for a comparative psychology of the sexes.) *Zsch. f. Sex.-wiss. u. Sex.-pol.*, 1929, 26, 81-87.—There is no appreciable sex difference in the frequency of mental diseases. The psychopathology of the sexes indicates a greater affective excitability among females than among males. There is a tendency among females for the sexual and erotic to occupy the central position in their thought and emotions. Females show a greater tendency for impulsive acts born of the mood of the moment. Their whole make-up is closer to that of the child and their behavior is more fickle than that of the male. There exists a close relationship of the inner feelings and emotions with love and motherhood.—H. S. Clapp (Valhalla, N. Y.).

3613. Gordon, A. Hallucinosis as a clinical entity. *J. Nerv. & Ment. Dis.*, 1928, 68, 502-508.—A case of hallucinatory phenomena which does not belong to the category of obsessive hallucinations or of hallucinatory obsessions, but is in itself a distinct psychosis which could be named a true hallucinosis. It is not dependent upon, and is totally free from, any associations with other psychotic phenomena.—R. A. Young (Boston Psychopathic Hospital).

3614. Green, C. V. Birth and death rates of the feeble-minded. Cold Spring Harbor: Eugenics Record Office, 1928. Bull. No. 26. Pp. 34.—See III: 1113.—R. R. Willoughby (Clark).

3615. Henry, G. W., & Doyle, M. C. H. Focal infection in teeth. *Amer. J. Psychiat.*, 1929, 8, 915-927.—Among some of the conclusions noted are: (1) pathogenic streptococci occur with equal frequency in the teeth of both psychotic and non-psychotic patients; (2) no specific relationship between dental infection and any particular type of psychosis was observed. Bibliography.—W. M. Rosebrook (Boston Psychopathic Hospital).

3616. Jelliffe, S. E., & White, W. A. Diseases of the nervous system. (5th ed. rev.) Philadelphia: Lea & Febiger, 1929. Pp. 1,174. \$9.50.—“In this revision the more recent outlooks concerning the vegetative nervous system have received special attention, likewise the progress in the endocrine disorders. The concept of the nervous system as a coordinator of experience with the outside world is still further advanced. The dissolution of function that results from conflict with extraneous energy systems, be they traumatic, bacterial, toxic, or psychological, are carefully reviewed and their results simplified. . . .” The three major divisions of the book concern the physico-chemical systems, the sensorimotor systems, and the psychical or symbolic systems. This latter division is developed in the light of the conception of the individual as an integrated whole and on the assumption that the wish is coming to replace sensation as the unit of psychological experience.—W. S. Hunter (Clark).

3617. Jewell, E. J. Research in progress. Mental growth of borderline feeble-minded. *Tr. School Bull.*, 1929, 26, 38-42.—Cases which had been at Vineland several years were studied. Three developmental types of feeble-mindedness were demonstrated at the borderline level: (1) Potential feeble-mindedness, a type not recognizable through intelligence test at an early age; progressive retardation, decreasing IQ, rate of growth not comparable to average normal, school retardation. (2) True “borderlinity”; 50 cases examined, of which several remained fluctuating within borderline area. (3) Delayed development; hitherto little recognized type occurring in cases outside the average group; slow but steady mental growth long after final mental level should have been attained; develop beyond ranks of feeble-mindedness or “borderlinity” according to Binet tests. Clinicians should be on guard for this type. The cases are too few to offer anything but tendencies.—E. M. Achilles (Columbia).

3618. Kasanin, J. Personality changes in children following cerebral trauma. *J. Nerv. & Ment. Dis.*, 1929, 69, 385-406.—A study of the relation of cerebral injury to personality disorders. About 10% of the cases originally diagnosed as psychopathic personalities had serious brain injury during childhood or adolescence. In many instances the conduct disorder following the trauma was similar to that found in children following epidemic encephalitis. Case histories and references.—R. A. Young (Boston Psychopathic Hospital).

3619. Kilbourne, A. F. Minnesota in the development of the care of its insane. *Amer. J. Psychiat.*, 1929, 8, 1,077-1,083.—W. M. Rosebrook (Boston Psychopathic Hospital).

3620. Klein, E. Psychologic trends in psychiatry since 1900. *Amer. J. Psychiat.*, 1928, 8, 273-288.—A review is made of the work of Hippocrates, Aristotle, Descartes, the Renaissance, Locke, Berkeley, Hartley, and Wundt. Emphasis is placed upon the development of the body-mind problem from the 19th century to the work of Meyer and the individual as a totally functioning organism, the viewpoint of today.—W. M. Rosebrook (Boston Psychopathic Hospital).

3621. Kuenzel, M. W. A survey of Mongolian traits. *Tr. School Bull.*, 1929, 26, 49-58.—What is the Mongolian type? An experimental group of 31 Mongolians and a control group of 31 non-Mongolian feeble-minded were studied. Slanted eyes are found in 97% of the Mongolians but also in 32% of the non-Mongolian group. Almond-shaped eyes occur in 80% of the Mongolians but do not occur in the control group. The typical Mongolian is best described as having almond-shaped eyes, set in shallow and widely separated eye-sockets, with epicanthic folds and puffy eyelids. His tongue is unusually long, thick and broad with deep transverse fissures and often protruding from the mouth. The lips are thick, transversely fissured, the hands are dry and chapped, the voice is coarse and the gait “shambling.” Systematic scoring of dispositional and behavior traits did not show significant differences, but

subjectively the observers agreed that the personal-social behavior of Mongolians is superior. The Mongolians walked and talked later than the control group.—*E. M. Achilles* (Columbia).

3622. *Laschè, P. G., & Rubin, H.* Occupational therapy in the treatment of deteriorated patients. *Occup. Therap. & Rehab.*, 1929, 8, 153-158.—With a group of praecox patients occupation (in the literal sense) was one of the best therapeutic agents. A group of 70 was segregated with one attendant assigned to about 12 patients and remaining constantly with them. A detailed schedule of activity was followed each day, including considerable time devoted to personal hygiene and about 3 hours of occupational therapy. The patients were kept continually busy from 6 a.m. till 8 p.m. As a result the labor of caring for them was considerably decreased and their personal habits and general neatness improved.—*H. E. Burt* (Ohio State).

3623. *Lundholm, H.* Constitutional psychological factors in "functional" psychosis. II. Dementia praecox. *J. Nerv. & Ment. Dis.*, 1928, 68, 456-487.—The author briefly reviews a previous work in which he outlined a partly new working hypothesis concerning certain personality problems as presented to the psychiatrist in the study of functional psychosis. Following this he applies the hypothesis to the interpretation of schizophrenia. The hypothesis assumes an innate cycloid and schizoid disposition as a predetermining agent in the development of manic-depressive disorder and dementia praecox, and also assumes an innate disposition for the development of altocentric and egocentric personality traits which should be considered entirely independent of the cycloid and schizoid trait.—*R. A. Young* (Boston Psychopathic Hospital).

3624. *Malamud, W.* Psychoanalytic mechanisms in psychiatry. *Amer. J. Psychiat.*, 1929, 8, 929-941.—Two points are discussed: (1) the value of Gestalt psychology in psychiatry because it emphasizes the idea of the body as a whole; (2) the importance of psychoanalysis because it takes into account the interaction between a special personality and a given environmental situation. Bibliography.—*W. M. Rosebrook* (Boston Psychopathic Hospital).

3625. *Misch, W.* Über corticale Taubheit. (On cortical deafness.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1928, 15, 567-573.—Cortical deafness appears with the bilateral destruction of the auditory area in the cortex or its spinal cord radiations. When a patient has septic endarteritis an embolus in the left auricular appendage leads to right hemiplegia and sensory aphasia. Only a second injury by means of an embolus of the Art. fossae Sylvii causes complete right deafness. The brain hemorrhage soon leads to coma. In the autopsy only the median portion of the anterior cross-circumvolution shows itself affected, not the entire auditory cortex in Flechsig's sense.—*St. Krauss* (Freiburg i.B.).

3626. *Notkin, J.* Epileptic manifestations in the group of schizophrenic and manic depressive psy-

choses. *J. Nerv. & Ment. Dis.*, 1929, 69, 494-521.—A study of a group of schizophrenic and manic-depressive psychoses in which the convulsive seizures are of true epileptic nature in all their varieties. Findings of other authors are considered. Bibliography.—*R. A. Young* (Boston Psychopathic Hospital).

3627. *O'Malley, M.* Significance of narcissism in the psychoses. *Psychoanal. Rev.*, 1929, 16, 241-271.—A brief historical survey of the development of the concept of narcissism is presented, and the histories of eight hospital cases of extreme narcissistic psychoses serve to illustrate the theoretical considerations which are brought out. It is emphasized that psychotic patients are more inaccessible to treatment than psychoneurotics, because the narcissistic disturbance is usually more severe, and such patients are no longer capable of transference to an external love object. The reconstruction of personality which can be effected by means of transference in the cases which the general psychoanalytic practitioner meets, can in the case of hospital psychotics often be effected only by education, with the narcissism itself as the only agent for integration. The bibliography contains 20 titles.—*M. N. Crook* (Clark).

3628. *Orton, S. T.* The three levels of cortical elaboration in relation to certain psychiatric symptoms. *Amer. J. Psychiat.*, 1929, 8, 647-659.—These three levels rest on observations of cases of brain destruction and defective function. The evidence from destructive lesion may be epitomized in the three clinical conditions: (1) cortical blindness, in which there are no conscious visual processes, though the lower reflex phenomena of the eye remain; (2) mind blindness, in which the animal or individual can move about without collisions, but does not recognize the meaning of objects seen; (3) word blindness, in which pictorial sensations are adequately used but language associations (in the broad sense) are defective.—*W. M. Rosebrook* (Boston Psychopathic Hospital).

3629. *Otis, M.* Improvement of feeble-minded girls over sixteen years of age. *J. Appl. Psychol.*, 1929, 13, 301-315.—Comparison of (1) Binet retests on a group of 25 girls who had been formed into a reading club (IQ's ranging from 53-85, median 68) and a control group of 10 non-club girls, with (2) original test results, points out that improvement in IQ is possible after the age of 16 years through training in reading and book work, even in feeble-minded cases, but such improvement seems to be due to changes in vocabulary score and understanding of language rather than to changes in memory span or reasoning ability.—*G. L. Barclay* (Nebraska).

3630. *Partridge, G. E.* Psychotic reactions in the psychopath. *Amer. J. Psychiat.*, 1928, 8, 495-518.—Clinical reports on 100 recent admissions to a hospital were used as the basis of a study of the relation between psychopathic personality and psychotic reaction. The general conclusion is that the distinct diagnostic picture appears to be rare. The

prevalence of mixed forms is suggestive; schizophrenic reactions are apt to be atypical; and in the manic-depressive types there is much that appears among these cases that is more reminiscent of the "hysterical" productions of the emotionally unstable than of the true manic-depressive.—W. M. Rosebrook (Boston Psychopathic Hospital).

3631. Partridge, G. E. Psychopathic personality and personality investigation. *Amer. J. Psychiat.*, 1929, 8, 1,053-1,055.—In the study of the psychopath it is of great importance to stress his social relations. This would include: an investigation of the individual in his total social setting; analysis of the group in which his psychopathology developed; and a careful inquiry of the group consciousness as such.—W. M. Rosebrook (Boston Psychopathic Hospital).

3632. Pollock, H. M. The new statistical system for institutions for epileptics. *Amer. J. Psychiat.*, 1929, 8, 1,071-1,076.—A brief description of a plan for collecting statistical data. Cards and directions can be secured from the National Committee for Mental Hygiene.—W. M. Rosebrook (Boston Psychopathic Hospital).

3633. Saunders, E. B. Association of psychoses with the puerperium. *Amer. J. Psychiat.*, 1929, 8, 669-680.—The study was based on 75 cases of psychoses associated with the puerperium. Four conclusions are drawn: (1) In many of the cases there were at the onset expressions of conflict about the child and its significance; (2) there was no evidence of definite etiology in toxemia or exhaustion, and little to prove association with endocrine disturbances; (3) it is more profitable to refer the psychosis to psychogenic factors, the most important of which seem to be those which make for sexual maladaptation or maladjustment; (4) there is nothing distinctive which differentiates the psychoses of the puerperium from corresponding types of psychoses at other epochs of life.—W. M. Rosebrook (Boston Psychopathic Hospital).

3634. Savitsky, N., & Goodhart, S. P. Significance of infection in the vegetative symptomatology of the neuroses. *J. Nerv. & Ment. Dis.*, 1929, 69, 53-58.—There is increasing evidence that the somatic experiences of the neurotic have been unduly neglected as a factor in determining his type of reaction. Injury to the vegetative nervous system by infectious process determines its ability to respond to cortico-subthalamie impulses and the vegetative response to stimuli of ordinary intensity in some neurotics indicates a physiological change in these centers. Bibliography.—R. A. Young (Boston Psychopathic Hospital).

3635. Schultz, J. H. Verwendung von Farbwirkung in der Psychotherapie. Technische Bemerkungen. (The application of the effect of colors in psychotherapy. Technical notes.) *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1929, 2, 296-299.—A description of a means of lighting the consultation room with white, blue, red, or violet light. It is reported that the red light gives the impression of a warm experience, while the blue light gives the

impression of a cool experience. It is found that all angiospastic-pseudoanemic and often asthenic and tetanoid types of both sexes and all ages react better in the red light, while all plethoric-congestive individuals react better in the blue light.—D. E. Johannsen (Wellesley).

3636. Smith, L. H. Two cases of Paget's disease (osteitis deformans) associated with mental symptoms. *J. Nerv. & Ment. Dis.*, 1928, 68, 578-582.—The first case shows little evidence of any causative relationship between Paget's disease and the mental illness, as the psychosis in the beginning definitely followed an attack of typhoid. In the second case a more direct causative relationship can be traced. Findings suggest that Paget's disease was responsible for a localized cerebral sclerosis and so in this way led to the mental symptoms.—R. A. Young (Boston Psychopathic Hospital).

3637. Stern, E. Zur Frage der Psychotherapie im Lungensanatorium. (The question of psychotherapy in a tuberculosis sanatorium.) *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1929, 2, 299-314.—The importance of combining psychotherapy with medicinal treatment of organic illness is emphasized; and despite the difficulty which may be brought upon the patient by having two doctors, the author recommends having a psychotherapist as well as a specialist. He does not recommend combining both offices in one individual, because the former demands as much special training and interest as the latter. The importance of psychotherapeutic treatment and the underlying reasons for it in the case of tuberculosis are discussed in some detail. One section is devoted to a discussion of types of relatives and the detrimental effect which they may have on tubercular patients; the importance of so educating them that their unconscious psychotherapy may be a real therapy is emphasized.—D. E. Johannsen (Wellesley).

3638. Taube, O. Einzelausbildung eines taubblinden Mädchens in Dänemark. (Individual instruction of a blind and deaf girl in Denmark.) *Zsch. f. Kinderforsch.*, 1929, 35, 494-508.—The author goes into the problem, while he adds Sarah Fuller's results with Helen Keller and the beneficent work of G. Riemann in Germany's only institution for deaf and blind children in Potsdam-Nowawes. He then discusses a case which has recently attracted much attention, viz., the instruction and training of a girl, Lilli J., born deaf and blind on July 8, 1916, who was treated in the Deaf and Dumb Institute at Fredericia by the teacher, Miss Heiberg. It is significant that Lilli is no different from a normal child either in play or in imitation. She has not yet acquired the ability to speak aloud, but instruction in articulation has begun. There is a special bibliography of 110 numbers.—O. Seeling (Berlin).

3639. Törne, F. W. Beitrag zur Kenntnis der Behandlung der tympanogenen Labyrinthiten. (Contribution to the knowledge of the treatment of tympanic labyrinthitis.) *Acta Oto-Laryngol.*, 1929, Supplementum IX. Pp. 56.—Examples and treatment are given for four types of labyrinthitis, namely, (1)

circumscribed, in which one of the labyrinth functions is absent, (2) serous, in which both the cochlear and vestibular functions are intact, (3) acute diffuse purulent, and (4) latent purulent. Bibliography.—*M. B. Mitchell* (Gardner State Hospital).

3640. Wechsler, I. S. *The neuroses*. Philadelphia: Saunders, 1929. Pp. 330. \$4.00.—This book is an expansion of the chapter on the neuroses in the author's *Text-book of Clinical Neurology*. The psychological point of view has been adhered to, though the author gives a comparative picture of various schools. The introduction contains a section on the history of psychiatry and one on the development of psychopathology. The headings of the other chapters are as follows: mental mechanisms; etiology of the neuroses; classification of the neuroses; clinical manifestations of the neuroses; the diagnosis, course, and prognosis of the neuroses; the treatment of the neuroses. In addition to a bibliography of about 70 titles and an index, there are 3 appendices under the following heads: history and examination of the patients; general intelligence, mental level, and the psychoneuroses; psychometric tests.—*M. N. Crook* (Clark).

3641. White, W. A. *Definition by tendency*. *Amer. J. Psychiat.*, 1928, 8, 251-262.—The author points out what he considers the main points in the trend of present-day psychiatry: (1) concept of the organism-as-a-whole; (2) time as a common factor of psychopathological manifestations; (3) importance of the ego, particularly emphasized in the region of the psychoses; (4) the antipathic group of emotions, hatred, aversion, dislike and so on, capable of sublimation and of integration in the service of the total personality as well as the sympathetic or creative group of emotions. The greatest possible adjustment is reached when a given stimulus releases a response that is 100% efficient. It is obvious that at this point consciousness would be done away with. Consciousness, however, is still needed between perception and action in order to bring about growth and development. Bibliography.—*W. M. Rosebrook* (Boston Psychopathic Hospital).

3642. Wiersma, D. *De behandeling van psychopathen in Denemarken*. (The treatment of psychopaths in Denmark.) *Mensch en Maatschappij*, 1929, 5, 102-111.—The treatment of psychopaths in Denmark is still in an initial stage. It is based on a law of 1925, which deals only with sexual and aggressive offenses, not yet including offenses against property. The principle underlying this law is that the psychopath in case of a definitely ascertained decreased moral responsibility as a result of inferior mentality should not be punished but merely detained in a special institution; this detention has entirely the character of a therapeutic measure and can therefore never be ordered without psychiatric advice. The judge is free to follow this advice or not. If detention is ordered a guardian is appointed to take care of the interests of the psychopath during his stay in the institution. The detention is always for an indeterminate period; release can only be ordered by the judge, after psychiatric advice has been given; re-

lease may be definite or conditional; it is practically always the latter, so that the psychopath may be returned without a trial if he again commits an aggressive or sexual offense. There are five institutions to which psychopaths can be sent, i.e., Sundholm in Copenhagen for male psychopaths, sex delinquents; Sinds-Sygehospitalet Nykøbing Sjaelland for the insane, with an especially protected department for the criminal insane, where psychopathic delinquents are also being kept; and the institutions of Prof. Keller at Brejninge and on the islands Livø and Sprøge, where primarily mentally defective individuals are being kept. The patients at Brejninge enjoy a large amount of freedom; of the ones who cannot be trusted to such an extent, the men are being sent to Livø, the women to Sprøge; although occasionally psychopaths are being kept in these three places. The general conclusions from the observation of these institutions are: it is desirable to place a small number of patients in one room; occupation should be obligatory for the patients, which it is not in the two first-mentioned institutions; there should be opportunity for experimental psychological research; the superintendent of such institutions should be a physician-psychiatrist, which is not the case in Sundholm. The combination of psychopaths and insane or of psychopaths and mentally defectives is undesirable because of the bad influence of the psychopaths on the morale of the other frequently suggestible patients.—*R. van der Heide* (Radcliffe).

3643. Wilson, S. C. *Habit training for mental cases*. *Occup. Therap. & Rehab.*, 1929, 8, 189-198.—Habit training is a common sense method of caring for the deteriorated patient, especially the dementia praecox, whose habits are notoriously disorganized. Small groups are desirable, and should be isolated as much as possible. Every movement is supervised and the patients are not allowed to shirk any of the details of their routine duties. Any talent they may have is encouraged. A progress record and chart for each patient is kept. Two typical cases are described.—*H. E. Burtt* (Ohio State).

3644. Ziegler, L. H. *Clinical phenomena associated with depressions, anxieties and other affective or mood disorders*. *Amer. J. Psychiat.*, 1929, 8, 849-879.—The subject is presented under the following types of disturbances: subjective sensory; those of a functional nature referred to the gastrointestinal tract, cardiac system, respiratory system, and genital system; and finally a brief discussion of a non-classified group, termed miscellaneous. Bibliography.—*W. M. Rosebrook* (Boston Psychopathic Hospital).

3645. Zilborg, G. *The dynamics of schizophrenic reactions related to pregnancy and childbirth*. *Amer. J. Psychiat.*, 1929, 8, 733-767.—A brief historical account is given. Several cases and their analyses are presented. Bibliography.—*W. M. Rosebrook* (Boston Psychopathic Hospital).

[See also abstracts 3543, 3779, 3780, 3782, 3783, 3810, 3896, 3906.]

## SOCIAL FUNCTIONS OF THE INDIVIDUAL

3646. [Anon.] **Population of the Ozarks.** *Eug. News*, 1929, 14, 78.—Review of an article appearing elsewhere.—B. S. Burks (Stanford).

3647. [Anon.] **A needed amendment to the current census bill.** *Eug. News*, 1929, 14, 81.—The name and racial descent of the father and the maiden name and racial descent of the mother of each person enumerated should be included in the census schedule.—B. S. Burks (Stanford).

3648. Appleton, C. **Quelques prodiges antiques au point de vue de la critique et la science modernes.** (Some ancient prodigies from the viewpoint of modern criticism and science.) *Mercur de France*, 1928, 206, 360-371.—It is unwise to question all stories of prodigies for there is generally some truth behind them. To illustrate, the ability of aviators to remain in the air for hours with the engine closed off, suggests a truth behind the story of Daedalus. Three prodigies connected with Tarquin the Elder are cases in point. The eagle that carried off his hat had probably been trained. The trick of the trained eagle has frequently been repeated, for instance by Louis Napoleon at Boulogne in 1840. The story of the augur, Attus Navius, who cut a whetstone with the king's razor, can be explained by supposing either that he was very skilful in handling the stone, or that he outwitted the king. Finally, as to the flame that played around the head of Servius Tullius, similar phenomena due to a neuropathic condition have been observed in modern times. (Literature on the latter subject is cited.) Such stories are not due to invention. Their inclusion in the accounts of early Roman history should be taken as a proof of the correctness of those accounts.—(Courtesy *Social Science Abstracts*).

3649. Bailey, P. **The psychology of human conduct: a review.** *Amer. J. Psychiat.*, 1928, 8, 209-234.—A review of Pierre Janet's *Psychologie des Conduites*. The hierarchy of conduct is divided into three levels: (1) inferior, which consists of the reflex, perceptive and social types; (2) intermediate, the next higher level, consisting of the intellectual assertive and reflective types; and (3) superior, which may be of the rational, experimental or progressive types. The activation of conduct is presented under three heads: (1) asthenia, slight, moderate or grave; (2) oscillation of force; and (3) nature of psychological force.—W. M. Rosebrook (Boston Psychopathic Hospital).

3650. Bakker, C. **Het vieren van "den Luilak" aan de Zaan.** (The celebration of "Luilak" on the river Zaan.) *Mensch en Maatschappij*, 1929, 5, 233-239.—Describes in detail the celebration of a popular holiday on the river Zaan. The day is named "Luilak," meaning sluggard, or late sleeper, from the nature of the festivities, which center around the searching out of the late-sleeper on that particular day, and if found, draping his door with nettles, or even inflicting stripes with a nettle switch. In recapitulation the author calls to mind the Lupercalia of the old Romans. The article is a criticism

of a film presentation of this feast, and compares it from personal experience, in the main favorably, with the manner of its celebration 50 years ago.—H. Hospers (Western Theological Seminary).

3651. Baumann, H. **The division of work according to sex in African hoe culture.** *Africa*, 1928, 1, 290-319.—The theories of woman's part in the origin of primitive hoe culture and the connection between this activity and a matriarchal society are borne out by studies of several hundred African tribes. Conversely, as a new hoe culture requiring a greater amount of work is developed, and as the plough is introduced, man's participation becomes more important, and a patriarchal society results. As soon as a tribe changes from cultivation by women to that by both sexes, an increase in the intensity of culture can be observed. This article contains tables showing division of work in the tribes studied, an important bibliography of pertinent English, German, French and Portuguese books, periodicals and manuscripts and maps showing where female hoe culture and matriarchy exists.—(Courtesy *Social Science Abstracts*).

3652. Beresford-Stooke, G. **Akamba ceremonies connected with dreams.** *Man*, 1928, 28, 176-177.—(Courtesy *Social Science Abstracts*).

3653. Beresford-Stooke, G. **Ceremonies designed to influence the fertility of women.** *Man*, 1928, 28, 177.—(Courtesy *Social Science Abstracts*).

3654. Beth, K. **Die Religion im Urteil der Psychoanalyse. Sigmund Freuds Kampf gegen die Religion.** (The psychoanalytical judgment of religion.) *Zsch. f. Religionspsychol.*, 1929, 2, 76-88.—Beth takes issue with Freud's book *Die Zukunft einer Illusion* because Freud seems, as it were, to find the peak of his life's work in healing mankind from religiosity, from a neurotic complex. Freud thinks that he has deduced the genealogical development of religion from the individual development of neurosis. Beth now puts the fundamental question both as to the justification and as to the actual bearing of such a psychological explanation. Freud's attitude is not even psychological. He evades the difficulty of delimiting the problem of religion by simply putting to one side the phenomena of religion, "does not trouble himself about their manner of appearance and therefore completely overlooks the real being of religion." Freud "analyzes one knows not exactly what; at any rate not religion." Only the method which Freud scorns can approach the goal; namely, to keep in mind from the beginning that the explanation deals with a totality of being, an organic whole, and that religiosity is a totality of sensations, feelings and volitions. And in this method analysis and synthesis must balance each other. Freud has neglected to give the two proofs necessary for his neurotic theory. It is also characteristic that Freud does not use the worn-out phrase that religion is inimical to culture, but that something like the opposite is the case. But as such, religion, like all culture, opposes the individual. Beth refutes the Freudian assumption by forming connections with his other expositions.—A. Römer (Leipzig).

3655. Blondel, Ch. *L'âme primitive d'après M. Lévy-Bruhl.* (The primitive soul according to Lévy-Bruhl.) *Rev. de mét. et de mor.*, 1928, 35, 381-407.—(Courtesy *Social Science Abstracts*).

3656. Bonger, W. A. *Zelfmoord als maatschappelijk verschijnsel.* (Suicide as a social evil.) *Mensch en Maatschappij*, 1929, 5, 281-303.—Dividing the domain of society into the normal and the abnormal, the author classifies suicide with crime; it runs counter to the nature of man and society. Moral appraisal varies with motive and circumstance; for example, in different lands, and in the church. The history of suicidology is briefly traced. Two years ago Hans Rost issued a bibliography in Germany, containing more than 3,700 titles. The article centers around a number of statistical tables, which are explained. Table I gives the absolute number of suicides in the Netherlands, 1900-1926, and the number per 1,000 inhabitants. Table II lists a number of European lands and Japan, showing clearly that suicide has a constant cause. Table III gives the number per 1,000 from 1871 to 1895, and reveals a significant increase during the 19th century. Table IV tabulates four methods; hanging, drowning, shooting, and poisoning. It reveals that the more sophisticated methods of pistol and poison are dominant. Tables V and VI list personal circumstances that lead to suicide, including the element of time of life. Tables VII and VIII point out that suicide (in Switzerland) is most general among widows, then among widowers, and least general among the married. Table IX points out that suicide is particularly heavy among the military. Table X is a comparison of city and country suicides; the former gives a much higher figure. The proportion in religion and suicide is in the following order: Protestants, Catholics, Jews. Tables XI and XII give motives: erotic, altruistic, ego-altruistic, impulse, concern for the future, physical and psychical suffering. The importance of background is emphasized, because of the psychiatric element. In conclusion: suicide will decrease as we succeed in removing the social causes. Man must be made sound in body and in mind and suitable living conditions must be provided.—H. Hospers (Western Theological Seminary).

3657. Brown, W. A. *Some needed emphases in contemporary religious education.* *Rel. Educ.*, 1929, 24, 391-400.—We are gradually approaching a union of education and religion, and to this end emphasis should be put on true scholarship, which will do away with superficiality and dogmatism.—J. P. Hylan (Stoneham, Mass.).

3658. Brunner, E. de S. *Immigrant farmers and their children; with four studies of immigrant communities.* Garden City: Doubleday Doran, 1929. Pp. 249. \$2.74.—W. S. Hunter (Clark).

3659. Budlong, J. N. *Aimee Semple McPherson.* *Nation*, 1929, 128, 737-773.—Gives the early emotional history of the revivalist in an attempt to explain the inconsistencies of her life and work.—M. Goodrie (Clark).

3660. Burgess, E. W. [Ed.] *Personality and the social group.* Chicago: Univ. of Chicago Press,

1929. Pp. 230. \$3.00.—A group of articles most of which have appeared in the *American Journal of Sociology* and the *Publications of the American Sociological Society*. They are as follows: W. I. Thomas, *The behavior pattern and the situation* (see III: 1624); C. M. Child, *Biological foundations of social integration* (see III: 1581); L. K. Frank, *Physiological tensions and social structure* (see III: 1590); F. H. Hankins, *Organic plasticity versus organic responsiveness in the development of the personality* (see III: 1517); E. B. Reuter, *The personality of mixed bloods* (see III: 1614); R. E. Park, *Human migration and the marginal man* (see II: 3251); E. C. Hughes, *Personality types and the division of labor* (see III: 3316); Dwight Sanderson, *The relation of the farmer to rural and urban groups* (see III: 1617); N. S. Hayner, *Hotel life and personality* (see III: 3253); E. W. Burgess, *The family and the person* (see III: 1578); Ellsworth Faris, *The sect and the sectarian* (see III: 1968); H. D. Lasswell, *Types of political personalities* (see III: 1979); F. H. Allport, "Group" and "institution" as concepts in a natural science of social phenomena (see III: 1571); C. H. Cooley, *Case study of small institutions as a method of research*. "While persons and families are the usual objects of case study, the method may be extended to other constituents of the social process, to the life-histories of groups and institutions not too large to be treated in this direct and total fashion. These are also live things, and offer a field of behavioristic study, which though by no means unknown, has been relatively neglected." S. A. Rice & Willard Waller, *Stereotypes* (see III: 1994); J. H. Kolb, *Special-interest groups in rural society*, a case study of 351 local organizations in five Wisconsin counties, 12 isolated and 7 fully analyzed. N. Carpenter & G. Doughton *Case studies on the rôle of religion in the dissociated family* (see III: 1963); C. R. Shaw, *Correlation of rate of juvenile delinquency with certain indices of community organization and disorganization* (see III: 1997); J. Slawson, *Causal relations in delinquency research* (see III: 1998); W. C. Reekless, *A sociological clinic for the study of juvenile delinquency* (see III: 1993).—J. C. Spence (Clark).

3661. Byrne, E. J. *The religious issue in national politics.* *Cath. Hist. Rev.*, 1928, 8, 320-364.—The anti-Catholic prejudice in the United States is traced to the anti-papal passion of Queen Elizabeth. Catholics and not Protestants have been the strongest champions of separation of state and church, as is shown by the union of church and state in many of the original colonies. Religious qualifications for office favoring Protestant sects were not removed from statutes and constitutions until well into the nineteenth century. The progressive life has not yet removed the undemocratic anti-Catholic prejudice. This prejudice has played a part in practically all national campaigns, probably a decisive part in the election of 1884; but though it has been most evident in relation to the office of president, it has caused numerous storms of protest against executive ap-

pointments to cabinet and judicial posts.—(Courtesy *Social Science Abstracts*).

3662. Chaffee, G. E. The family and character education. (IV). The family and the community. *Rel. Educ.*, 1929, 24, 444-445.—J. P. Hylan (Stoneham, Mass.).

3663. Chapin, F. S. Growth curves of institutions. *Scient. Mo.*, 1929, 29, 79-82.—"Social institutions pass through a cycle of change in structure and function" that should be measurable in units more or less homogeneous. Examples show a three-fold cycle: "origination, spread or else modifications and amplifications, and integrations or consolidations."—J. F. Dashiell (North Carolina).

3664. Coe, G. A. Not in the fundamentalist curriculum. *Rel. Educ.*, 1929, 24, 506-507.—The violent agitations in two of the fundamentalist educational institutions between conservatives and ultra-conservatives suggest that such doctrines favor mutual suspicion and a lack of ethical perspective.—J. P. Hylan (Stoneham, Mass.).

3665. Collier, J. Amerindians. Problems in psychic and physical adjustments to a dominant civilization. *Pacific Affairs*, 1929, 3, 116-122.—(Courtesy *Social Science Abstracts*).

3666. Courtis, S. A. The functions of a modern church. *Rel. Educ.*, 1929, 24, 508-511.—The future church, organized on scientific principles, would be a place of social cooperation in the discovery, testing, and application of spiritual truths.—J. P. Hylan (Stoneham, Mass.).

3667. De Angulo, J., & Freeland, L. S. A new religious movement in north-central California. *Amer. Anthropol.*, 1929, 31, 265-270.—New religions seem to appear as frequently among modern Indians as they do among modern whites. Little is known about the beginnings of most of these modern Indian religions, or whether they are usually due to the upsetting conditions of modern civilization. Opportunities for the study of such phenomena should not be neglected. The present movement has for its background the remains of the ghost-dance religion and the older shamanistic systems of this area. The shamanism of this particular region is stereotyped, while the new doctors are of the inspirational variety. They smoke innumerable cigarettes to acquire "power," cure by suggestion, and are moral reformers, preaching against drinking, gambling, swearing, and lying. The authors describe the personal characteristics of the leading prophets of the new order and note the "absence of any animosity toward it on the part of other doctors of the old-time persuasion."—C. M. Diserens (Cincinnati).

3668. De Clercq, A. Deux textes Luba. (Two Luba texts.) *Congo*, 1929, 1, 1-26.—The first of the two (Ba)luba texts, with French translation and considerable ethnological interest, is one of the so-called "Mibelu" or "Minangu," i.e., precepts and exhortations in which the mothers advise their daughters on conduct in later life, especially in the married state. This instruction is given in the form of a lengthy tale. All the petty jealousies and intrigues between

the "muadi," i.e., the principal wife, and her competing co-wives are clearly brought out, as well as the family strife resulting from the father showing predilection for the child of a certain wife to the detriment of the rest of his offspring. The second text deals with the songs and lamentations, signs of frantic grief a Luba woman shows upon the loss of her husband, together with the answers chanted by the other women of the village to comfort her. The texts are preceded by a short (1 page) introduction.—(Courtesy *Social Science Abstracts*).

3669. De Meijer, M. De sprookjesstudie op nieuwe banen. (New phases in the study of tales.) *Mensch en Maatschappij*, 1929, 5, 112-118.—This article reviews the treatise *Die Märchen von Klugen Rätsellösern* by Jan de Vries, being a study of the tale *Die Kluge Bauerntochter*. Jan de Vries claims to use the Finland or geographical-historical method, the basic principle of which is: "Jedes Märchen ist ursprünglich eine feste Erzählung, die nur einmal an bestimmter Stelle und zu bestimmter Zeit entstanden ist." The aim of the investigation, according to this theory, is to find this original form and to determine the spot where it originated. The author investigated more thoroughly than ever has been done before all the separate elements of the theme as to their individual existence or as to their connection to other themes. This investigation throws a new light on the growth of this tale and thus contains a richly documented cultural-geographical study. Jan de Vries does not strictly limit himself to the use of the Finland method: the latter does not accept in any way ethnological studies; although Jan de Vries applies only occasionally the ethnological explanation, we find in his work a thread connecting the geographical-historical method with the older anthropological method. Edwin Sidney Hartland, the author of the principle English mythographical study *The Legend of Perseus*, and especially Andrew Lang in his introduction to Marian Roalfe Cox's *Cinderella* both defend the anthropological standpoint and are very skeptical as to the value of the historical-geographical method. Even more so was Joseph Bedier in his famous book *Les Fabliaux*. *Die Märchen von Klugen Rätsellösern* is a most definite disproof of Bedier's view, that there is no room at all for the historical-geographical method.—R. van der Heide (Radcliffe).

3670. Densmore, F. Chippewa customs. Washington, D. C.: Gov't Printing Office, 1929. Pp. 216. \$1.50.—R. R. Willoughby (Clark).

3671. Densmore, F. What intervals do Indians sing? *Amer. Anthropol.*, 1929, 31, 271-276.—Indians when singing produce gradations of pitch smaller than those of our musical system, and the question arises whether these small gradations of pitch are part of a musical system more complex than our own. The author states several cogent reasons and quotes experiments to prove that such is not the case. The ear of the Indian is trained to hear sounds which we do not notice, but tests with standardized tuning forks do not indicate that he has a superior perception of pitch differences. He is not sufficiently log-

ical to evolve a complex musical system under the primitive conditions in which he lives. Moreover, the extreme individuality of the Indian would work against the acceptance of any such system. An analysis of phonographic records of 1,700 Indian songs leads to the same conclusion. The author closes with a number of queries designed to guide the course of future investigation.—*C. M. Diserens* (Cincinnati).

3672. De Vries, J. *Der altnordische Rasengang*. (The old Norse custom of creeping under the sod.) *Acta Philol. Scandinavica*, 1928, 3, 106-135.—The custom of swearing foster-brotherhood by mingling blood under an upraised sod is not merely a solemn manner of swearing an oath. A comparison with the folklore of other tribes indicates that it symbolizes the re-birth of two friends from a common mother. As they creep under the sod, the souls of dead kinsfolk (conceived as leading a shadowy life underground) enter into those thus re-born. The same ceremony as a sign of humiliation, like the Roman habit of sending the conquered enemy "under the yoke," is to be understood as originally a ritual action symbolizing that the death-doomed captive was allowed to have, literally, a new lease of life.—(Courtesy *Social Science Abstracts*).

3673. De Vries, J. *Over de stof der sproken en der boerden*. (On the subject matter of facetiae and fables.) *Nederlandsch. Tijdschr. v. Volkskunde*, 1928, 33, 161-180.—The popularity of droll stories and fables from the 12th century onwards is to be explained by the decline of knighthood that had been mainly interested in the romances of chivalry, and by the rise of the cities with their population of burghers, merchants, and artisans. The difference in style between chevaleresque and democratic literature is to be explained by the different outlook on life of the groups concerned. The writer next discusses the relation of the two literary genres with popular tradition. He considers that in an investigation of this problem valuable assistance is obtained by including a related genre, the exempla, in the inquiry. What makes the question very complicated is that frequently there has been borrowing from literary sources by the people, and vice-versa, so that we are often confronted with different versions of the same theme. As a whole, there has been little influence of the fables since these were, as a rule, diffused among the socially elect set, and the influences of the facetiae on popular literature is even less significant, as the sources were, as a rule, only accessible with difficulty. We far more frequently find evidence of a popular theme finding favor in artistic literature than a literary theme having a permanent popular vogue.—(Courtesy *Social Science Abstracts*).

3674. Dewey, J. *Character and events; popular essays in social and political philosophy*. (Ed. by Joseph Ratner.) New York: Holt, 1929. Pp. 877. \$5.00.—*R. R. Willoughby* (Clark).

3675. Doan, E. E. *The family and character education*. (V). *The viewpoint of the social worker*. *Rel. Educ.*, 1929, 24, 446-448.—*J. P. Hylan* (Stoneham, Mass.).

3676. Dobbs, C. *A changing viewpoint of pioneer development*. *Hist. Quar.*, 1928, 2, 145-157.—Dobbs shows, by quotations from modern historians of the frontier, how propagandists have in the past substituted romantic legends for the truth, and how influential such legends still are.—(Courtesy *Social Science Abstracts*).

3677. Downey, J. E. *Creative imagination. Studies in the psychology of literature*. New York: Harcourt Brace, 1929. Pp. viii + 230. \$3.75.—Discusses the differences in imagination which affect the literary taste of various readers, kinds of imagery and their significance, and inner speech and its effect both upon reader and author. Chapter X on *The Method of Style* analyzes the success of suggestion in arousing an image in the mind of the reader. "It was found that, if we except visual and kinaesthetic imagery, the following order represents the success with which images of a given kind were aroused through direct suggestion: auditory, 46.8%; olfactory, 39.3%; cutaneous, 35.5%; organic and pain, 30.7%; gustatory, 14.2%." Color, synesthesia, and an analysis of the minds of three poets from their poetry, are also discussed in this chapter. Attitudes, psychic patterns, and the logic of the emotions, the springs of the imagination, are treated; under the heading *Literary Subjectivity and Objectivity* are empathy, self and art, literary self-projection, esthetic objectivity in literature, an analysis of stories by Poe, Balzac and Wharton as examples of objectivity, hypnotic art, and introverted art.—*J. C. Spence* (Clark).

3678. Dubois, W. E. B. *The possibility of democracy in America*. *Crisis*, 1928, 53, 353-355.—The problem in America today is not the extension of democracy to wider fields but the protection and maintenance of democracy where it already exists. As such, democracy has not been successful. The greatest cause of this failure is the effect of the practical disenfranchisement of negroes in the South on the voting of the whites. Discrimination against the negro has brought similar discrimination against the white man who was not in accord with the dominant party organization. In eleven southern states (Va., N. C., S. C., Ga., Fla., Ala., Okla. and Texas) the population since 1870 has increased over 200%, but the voting population has increased only 131% and that despite woman's suffrage. In the election of 1920 in five southern states (S. C., Ga., Ala., Miss. and La.) the voting population (white and negro) amounted to 5,145,282 and the total votes cast were 635,512. This indicates the disenfranchisement of 4,489,770 voters. Subtracting the 19,000 negro votes registered, we have as a result 2,214,991 disenfranchised negroes. But we also have 2,297,799 whites in that class. It is the opinion of some that the "white primary" in these states modifies the situation somewhat, but any such relief is very slight. Oligarchy is being encouraged; cliques control and rule; the Fourteenth, Fifteenth and Nineteenth Amendments are practically nullified; and the restraining influence of third parties is forced to disappear. The disenfranchisement of the negro is costing the disenfran-

chisement of the white voter, and democracy is suffering accordingly.—(Courtesy *Social Science Abstracts*).

3679. Elliott, H. S. *The bearing of psychology upon religion*. New York: Association Press, 1928. Pp. 77. \$1.00.—W. S. Hunter (Clark).

3680. Flierl, J., & Hopkins, A. I. *Native life in the South-West Pacific*. *Int. Rev. of Missions*, 1928, 17, 538-549.—This article consists of two essays by experienced missionaries on the clash of culture in New Guinea and in Melanesia, as represented by the contact of Europeans with natives. Both emphasize the elementary but often neglected fact that the most satisfactory form of social development is that which comes from within, by the gradual decay of unfavorable practices with the adoption of Christianity, rather than by their legal prohibition, by the strengthening of local authority to deal with native offences, and by a sympathetic encouragement of the people based upon an intelligent understanding of their difficulties in the light of their own customs. Flierl, after describing discursively the good results obtained in New Guinea by such methods, stresses the evils of indentured labor, which not only dislocates the stability of the local village by the removal of many of the men, but frequently leads to their return with partially assimilated ideas which are detrimental rather than beneficial. Hopkins shows that each of the three regions of Melanesia has its own problems. In the south, under the joint Anglo-French Condominium agreement, there is an expansive and somewhat elaborate mechanism of government which has failed to check abuses; the natives have decreased sadly, and lethargy with race suicide prevails in most non-Christian villages. Central Melanesia is administered from Fiji, and lack of adequate communication leads to ignorance on the part of officials of conditions and needs in the islands. Australia holds the mandate for northern Melanesia where a dense population attracts European recruiters of labor with effects similar to those described in New Guinea. In all parts of Melanesia the spread of Western civilization forces the natives to make emotional and exhausting adjustments; in many islands the change, instituted too rapidly, has caused instability of social life, ennui, and death. There is need for coöperation between all classes of European residents and for utilization by governments of information obtained from those familiar with conditions in the administered areas.—(Courtesy *Social Science Abstracts*).

3681. Fox, G. G. *The Jewish community*. *Rel. Educ.*, 1929, 24, 542-552.—Originally there was no distinction between religious and secular education among the Jews. The importance of learning was emphasized and care taken to teach not only the young but the visiting stranger as well. Schools came to be established in Judea in 70 B.C. When Titus destroyed Jerusalem 480 schools were destroyed with it. With Jews as with Christians the old theological structure has collapsed. American Jews may be divided into four classes: (1) those who say all religions are equally good and allow their children to choose their own; (2) those who say there is no

longer occasion for religion; (3) those who maintain that the mission of the Jews is a purely religious one; (4) those who claim that the race and culture should be preserved as well as the religion. The Jewish educator must face not only this crumbling of his faith but also the fact that his pupils are submerged in a Christian culture, which, while not immoral in itself, opposes at every turn the Jew's cultural methods.—J. P. Hylan (Stoneham, Mass.).

3682. Geurtjens, H. *Het taboe-schap bij bevalingen op zuid N. Guinea*. (The tabu relating to childbirth in south New Guinea.) *Mensch en Maatschappij*, 1929, 5, 119-132.—Along the whole coast of south New Guinea we find a tabu of the mother just preceding and following childbirth. After describing the forms of the ceremonies involved, the author discusses the underlying principle of this tabu. One explanation is that of the impurity of the woman during this state, and the object of segregation thus is to prevent undesirable emanating influences on those about her. Another explanation, which the author apparently prefers, lies in the idea of the close relation between mother (or parents) and child. According to this explanation, the tabu is none other than the sociological outgrowth of the maternal instinct, which leads to this separation of parents, child and nearest relatives from the rest of the community, in an attempt to keep the relation of the newborn with his family intact. This theory explains the fact that the near relatives are not included in the tabu.—R. van der Heide (Radeliffe).

3683. Geurtjens, H. *Het schimmenoffer bij de Marindineezen*. (The Marindinese sacrifice to spirits.) *Mensch en Maatschappij*, 1929, 5, 321-331.—Many peoples express their faith in the continued existence of the soul after death by giving presents to accompany the dead. In this connection two things are evident: (1) the future life is a true reflection of the present, and (2) the spirit realm is conceived of as spiritualized; the forms of things continue, without matter. The Marindinese, a people of Dutch New South Guinea, agree in these conceptions. Their most important wealth consists of cocoanuts. These are presented in solemn and unique manner to the spirits at death. The festivities are described by the writer in considerable detail.—H. Hospers (Western Theological Seminary).

3684. Gill, M. A. *Underworld slang*. Kansas City, Mo.: South Side Pr. Co., 1929. \$0.50.—R. R. Willoughby (Clark).

3685. Hichens, W. *Native magic and leprosy in Africa*. *Discovery*, 1928, 9, 229-232.—The magical practices of East African savages often result not only in frustration of successful medical treatment, but in an actual increase in the number of cases. In a small tribe of 150,000 natives in Tanganyika 400 lepers were discovered, and more are known to exist. Magical practices having sound bacteriological bases, however, are used by individuals to afflict their enemies with the disease. The natives do not fear the plague as much as might be expected. They are very much opposed to medical treatment, but

have great faith in the power of the witch doctors to cure them.—(Courtesy *Social Science Abstracts*).

3686. Holmes, J. L. *Crime and the press*. *J. Crim. Law & Crimin.*, 1929, 20, 6-59.—A partial report of a study of newspaper practice in the handling of crime news, together with opinions as to its effect, as evidenced in the treatment of the Hall-Mills case by 12 New York daily papers for the period of Nov. 8 to Dec. 7-8, 1926, presenting: (1) a short historical survey of opinion regarding the influence of the press on crime; (2) an analysis of the amount of space given to crime news by each of the papers studied, in terms of number of items and linear inches of space (in three cases the per cent of total news space given to crime news); (3) methods of featuring crime news in headlines and pictures; (4) the results of a questionnaire on the influence of newspapers and moving pictures on crime, sent to 616 judges, court and police officials of New York State; (5) the effect of crime news on behavior through suggestion, prestige, etc. The figures available indicate an increase in the amount of crime news space during the past few decades. Of the 111 replies to the questionnaire, the majority of the justices of the supreme court of the state do not believe the influence of the newspapers to be detrimental, while the opposite opinion was expressed by the majority of the county judges, district attorneys, chiefs of police, and inspectors and captains of the New York police department. The replies of the officials indicate that in their opinion the newspapers are guilty of inciting to crime; of aiding criminals in the commission of crime through describing methods of committing such acts; of creating the impression that crime is profitable; of aiding criminals in escaping apprehension; of thwarting justice and preventing the securing of impartial juries by "newspaper trials"; of making the criminal a hero; and by omission at least of thwarting any deterrent effect of present penal methods. The history of the social treatment of criminals shows that severity of punishment is futile as a deterrent. It might be that the publication of crime news would in some measure act as a deterrent were the conviction and punishment instead of the glorification of the offender emphasized.—G. L. Barclay (Nebraska).

3687. Holzberg, J. *Divorce in Russia and America*. *Nation*, 1929, 128, 734-737.—Divorce in Soviet Russia is not as simple as the divorce law. Rigorous alimony laws and the powers invested in judges to interpret laws freely act as restraining factors.—M. Goodrie (Clark).

3688. Jancke, H. *Beiträge zur Psychologie der musikalischen Komposition*. (Contributions to the psychology of musical composition.) *Arch. f. d. ges. Psychol.*, 1928, 66, 437-492.—This article is concerned with a psychological analysis of musical creation based on a study especially of romantic composers (Beethoven, Schumann, Wagner, etc.). The necessary conditions for composing are musical ability and the impulse to respond to all experiences by creative activity. Besides these there are the special causes of composing, the strongest of which is suf-

fering, pain. Another is vitality, the joy of life.—K. F. Muensinger (Colorado).

3689. Jörgensen, O. *Om muligheden af en forskrivende videnskabelig etik*. (On the possibility of a determinative scientific ethics.) *Ark. f. Psykol. o. Ped.*, 1929, 8, 13-37.—A further exposition and elaboration of the author's ethics as published originally in book form in Danish in 1925: *Livsførelse* (*The Conduct of Life*), Copenhagen: Levin & Munksgaard. Bibliography.—M. L. Reymert (Wittenberg).

3690. Kern, A. *Vom innern Sprechen. Eine experimentelle Studie*. (Internal speech—an experimental study.) *Zsch. f. Kinderforsch.*, 1929, 35, 420-447.—The author has performed experiments on 100 children and has come to the conclusion that a definite stage of speech probably corresponds with a given degree of mental development, and also that each developmental step requires its definite stage of speech. For example, there is a natural tendency for an imbecile to remain in the peripheral language stages. The author distinguishes the following stages of language: (1) loud motor speech; (2) whispered motor speech; (3) silent motor speech; (4) silent non-motor speech, produced without articulatory movement and comprehensible only introspectively. With respect to the lower grades of the school, he urges a strong accentuation of the peripheral stages, without, however, entirely neglecting the motor speech of silent character and the non-motor stage. Kern conducted the experiments at the suggestion of Schilling.—O. Seeling (Berlin).

3691. Kern, E. *Wie sie dazu kamen*. (How they came to that.) Munich: Reinhardt, 1928. Pp. 182.—Brief accounts of the life histories of 35 inmates of houses of prostitution. In each case the author adds her own characterization and analysis, together with an indication of the intelligence level, based upon incidental intelligence tests. The book contains no quantitative material. 31 samples of handwriting are given.—W. S. Hunter (Clark).

3692. Kwint, L. A., & Paikin, M. J. *Sprachanomalien bei schulpflichtigen Kindern und ihre Bekämpfung*. (Anomalies of language in children of school age and means of combating them.) *Zsch. f. Kinderforsch.*, 1928, 34, 293-320.—The authors first take up in detail the nature of the individual anomalies. In stuttering they see a neurosis which manifests itself especially in rhythm of language. The authors then give a series of statistical tables concerning children with language defects in Russian schools. The more frequent occurrence of stuttering in Jewish children is explained by the neurobiological peculiarities of the race. As a means to combat language defects the authors recommend state or community care by way of special institutions, that is, in therapeutic courses and special schools. Subnormal children with language defects should be turned over to schools for retarded children.—O. Seeling (Berlin).

3693. Leiper, H. S. *Blind spots: experiments in the self cure of race prejudice*. New York: Friend-

ship Press, 1929. Pp. 159. \$1.00.—R. R. Willoughby (Clark).

3694. Lowie, R. H. *Culture and ethnology*. New York: Peter Smith, 1929. Pp. 189. \$2.50.—R. R. Willoughby (Clark).

3695. Lukas, J. *Transition und intransition in Kanuri*. (Transitive and intransitive in Kanuri.) *Wien. Zsch. f. d. Kunde d. Morgenlandes*, 1928, 35, 213-241.—An exhaustive comparison of contemporary speech forms and variants in the Kanuri language and dialects, with special reference to the comparison of alternative syntactical elements (method of "horizontal etymology"). Conclusions contrary or entirely supplementary to the classical studies of Benton, Meinhof and Nachtigall that in these variant alternatives of the case and tense forms, with the double use, there is evidence justifying the assumption of a mixed culture and racial stock in this area. The study treats particularly the *t* and *k* prefixes, and the transitive-intransitive syntax, using Koelle's dictionary of the Kanuri language as a basis.—(Courtesy *Social Science Abstracts*).

3696. Martell, P. *Zur Geschichte der Prostitution der Stadt Berlin*. (The history of prostitution in the city of Berlin.) *Zsch. f. Sex.-wiss. u. Sex.-pol.*, 1929, 26, 133-145.—During the Middle Ages and the next few centuries there are very few sources concerning the history of prostitution in Berlin. Only a few exist for the 18th century. The acts of the imperial chief of police of Berlin disclose the first facts. The history of prostitution is so closely linked with adultery that they can scarcely be separated. Adultery was punished as severely as murder in the Middle Ages. Fallen women were punished not less severely. Before the 16th century fallen women were given corporal punishment. After that century they were fined. The 17th century was less severe in the punishment meted out for immorality. In 1580 Berlin possessed an openly known brothel. There were also prostitutes who travelled from place to place. The church fought this and issued a mandate admonishing the clergy to eradicate immorality. There are no definite reports concerning prostitution during the Thirty Years' War. In 1780 there were not less than 100 brothels in Berlin. They were divided into three classes: the lowest was for poor men, the second class for merchants, and the third for more distinguished individuals. In the year 1795 there were 54 brothels with 257 prostitutes registered by the police. At that time Berlin had only 173,000 inhabitants. In 1818 the greater part of the prostitutes in Berlin originated from other cities. The number of brothels had decreased to 50 by 1800. Also in this century the brothels were confined to one street. The article concludes with a description of life in a typical brothel.—H. S. Clapp (Valhalla, N. Y.).

3697. Maunier, R. *Des comportements sociaux et de leur classification*. (Social behavior types and their classification.) *J. de psychol.*, 1929, 26, 153-162.—The author subscribes to the organic concept of social organization. Production, relation, and adoration are the three fundamental types of social be-

havior. Productive behavior is divided into three types, transformation, translation, and destruction of environmental objects. The life of relation involves language, laws, morals, contracts, etc. In the life of adoration we find such aspects of behavior as liturgy, rites, magical practices, transmitting of myths, proselytism, formation of cults, tabus, etc. In all collective behavior authority enforces conformity to the customary forms of life.—N. L. Munn (Clark).

3698. McGoldrick, J. *Our American mayors: XII. "Jimmy" Walker*. *Nat. Municip. Rev.*, 1928, 17, 567-578.—Jimmy Walker is attributed to a political accident making necessary a candidate popular with "the boys" in Tammany Hall when Hylan was driven from office. Walker is an amiable, indeed charming *bon vivant*, with very little gift for or interest in routine. The personnel of his administration represents an almost complete continuance of the group in office under Hylan. Most of the problems inherited from the Hylan regime are very little nearer to solution than when he left them. The subway and bus problems are described in some detail. The Mayor's handling of these and of the numerous petty scandals of his administration is analyzed critically. Commenting on his all but universal popularity, the author suggests that his gaiety typifies not so much the actuality but the aspirations of the average New Yorker. He queries whether his popularity could survive an unfavorable decision from the United States Supreme Court on the pending five cent car fare case.—(Courtesy *Social Science Abstracts*).

3699. Mead, M. *An inquiry into the question of cultural stability in Polynesia*. New York: Columbia Univ. Press, 1928. Pp. 89. \$2.00.—The cultural stability in 5 insular cultures of Polynesia (Hawaii, Marquesas, New Zealand, Tahiti, Samoa) is attacked by an analysis of the elements which go to make up certain complexes of activities, common to all the groups, i.e., canoe-building, house-building, and tattooing. These complexes were chosen because they enter into the life of the people in the same way (all "involve a definite technique, some decorative art, functions of craftsmen and priests, ritual observances and tabus, and some relation to the important Polynesian element of rank"), and because of the type of material available for Polynesia. The basic assumption in the study is that the elements under consideration have been common to the whole area for several hundred years, undergoing modification in each insular group. The approach is primarily from the standpoint of the indigenous culture, the three complexes having a common core throughout the group. Hence, the elements are considered most stable which show the greatest similarity in the 5 groups. In the case of the canoe- and house-building complexes, variations in technique or mechanical principles were very rare, but the relative importance of craftsmen and priests, the rôle played by religion and rank, etc., vary tremendously. The tattooing complex, because of its greater simplicity probably, is more constant, but the style of decoration is unique and specially developed in each area. In conclusion

it is pointed out that while no generalized positive conclusions can be drawn because of the limited nature of the study, it may be said that since "taboos, religious significances, rituals, prerogatives of rank, and questions of professional status are found to be so variable and sensitive to reinterpretation, then evidence of this type is manifestly unreliable data on which to base historical reconstructions. Elements which do vary as much as these, which yield so swiftly to the cultural emphasis within one small area, are not valid data for the study, for instance, of possible culture contact between Oceania and the Americas, or Africa and Melanesia."—D. E. Johannsen (Wellesley).

3700. Mehta, S. S. Indian and Roman marriage ceremonies compared. *Man in India*, 1928, 8, 123-135.—The first part of the article reviews the development of forms of marriage and conjugal relations of the Hindus based on both mythology and history. The marriage and the position of the woman in matrimony went through different stages till it reached its ideal conception of a spiritual and sexual union for life, based on love. Going over to the consideration of the marital relations of the Romans, a European branch of the Aryan family, there are many points of similarity between their rites and ceremonies before, during, and after the wedding and those of the Hindus. The treatment of the subject is special and technical.—(Courtesy *Social Science Abstracts*).

3701. Merzbach, A. Über die sprachliche Wiederholung im Biblisch-Hebräischen. Ein psychophysiologischer Versuch. (Linguistic repetition in Biblical Hebrew. A psychophysiologic study.) *Jeschurun*, 1928, 15, 267-287.—The phenomenon of iteration occurring in voluntary and involuntary motions is found also in speech. Semitic languages and especially Hebrew, display frequent repetitions, many of which, both verbal and syllabic, are employed for conjugation and declension. Excluding these there are: (1) "Affective" iteration, occurring in emotional stress or pain; this is a motor manifestation of inner excitement or helplessness. (2) Intensive iteration, occurring in expressions of ten classes (with examples cited for each). (3) Iteration in primary word formation, especially in names of places, persons, animals, members, complexions. The verbs of the class called *mediae geminatae*, or 'ayin 'ayin, many of which refer to the senses or to the emotions are frequently palpable phonetic representations of the meaning, some acoustic, some visual. Considered from the point of view of brain physiology, we have an abeyance of the cortical part of the act of speech formation, and a prominence of subcortical impulses. The Hebrew of the Bible is not a book language but a living tongue.—(Courtesy *Social Science Abstracts*).

3702. Miller, P. G. Contemporary observations of American frontier political attitudes, 1790-1840. *Int. J. Ethics*, 1928, 39, 80-92.—The author notes the observations in what is now the Middle West of Bernhard of Saxe-Weimar, Bradbury, Buckingham, Buttrick, Cuming, Evans, Faux, Flagg, Flint, Hodgson, Lafayette, Lefasseur, Maximilian of Wied, Melish, Mischeaux, Sealsfield, de Tocqueville, and

Weld. He quotes anecdotes showing how politics was an outlet for primitive passion, and an election an opportunity for gregarious festivity. The frontiersmen, said Flint, "believe almost any timber can be worked into the political ship." Bernhard and Lafayette found state governors working with their hands. In the law courts, similarly, convention was ignored. Miller attributes the disorderliness of the frontier, in part, to reasons which, he considers, have been insufficiently emphasized, namely, that owing to rapid development barbarism and civilization could be found side by side in the same areas, and that immigrants coming from different states brought different habits.—(Courtesy *Social Science Abstracts*).

3703. Mitra, S. C. On two recent instances of exorcism from southern and eastern Bengal. *Man in India*, 1928, 8, 191-202.—The well-known primitive beliefs that diseases are caused by evil spirits entering the human body, and that they may be cured by exorcism or expulsion of these disease-spirits, are also familiar to the inhabitants of southern and eastern Bengal. The author describes two interesting cases of exorcism and the handling of people accused of sorcery and intercourse with evil spirits.—(Courtesy *Social Science Abstracts*).

3704. Mowrer, E. R. The family and character education. (III). Effect of domestic discord upon conduct of children. *Rel. Educ.*, 1929, 24, 442-444.—J. P. Hylan (Stoneham, Mass.).

3705. Munro, W. B. Intelligence tests for voters. *Forum*, 1928, 80, 823-830.—The suffrage has been expanded during the past century to the widest possible point. In the future there will be a recession, not in the form of property, religious, racial or sex restrictions, but rather by the elimination of the least intelligent. This is already being done on a large scale by New York State, where the new voter who has not graduated from the eighth grade must pass a simple intelligence test. Twenty per cent of those who take the test fail to pass. The level of intelligence of the electorate has gone down, generation after generation. An intelligence test, administered by the school authorities, is necessary to maintain a reasonable average of electoral capacity.—(Courtesy *Social Science Abstracts*).

3706. Myers, A. J. W. Character education in the Christian church. *Rel. Educ.*, 1929, 24, 536-541.—A variety of incidents are given in which Christian assistance and ideals have stimulated, especially among the young, an intellectual enrichment and altruistic ideals.—J. P. Hylan (Stoneham, Mass.).

3707. Nelson N. C. First steps in human culture. *Eug. News*, 1929, 14, 83-86.—Human culture cannot be sharply distinguished from animal culture. Civilized human behavior, viewed in the large, is still mostly of the old, instinctive, unconscious type. Environmental change or disturbance and the contributions of the occasional genius account for progress.—B. S. Burks (Stanford).

3708. Neumann, J. Psychotherapie, Theologie, Kirche. (Psychotherapy, theology, church.) *Zsch. f. Religionspsychol.*, 1929, 2, 41-76.—Evangelical

theology should learn to cognize especially the problem of psychotherapy, so that the spiritual seeker may not meet with psychological dilettantism in the pastor. Neumann then proceeds to relate in detail two cases out of his practice in order to show by means of them the problems for church and theology. "Both cases show positive and negative relations to religion." Neumann then gives a summary of the laws disclosed by his treatment: a healthy spiritual life cannot be separated from a healthy social life; the cure of spiritual disturbances is possible only with the restoration or creation of social relations in the sense of neighborly contacts; spiritual disturbances are caused by organ inferiority, strict upbringing, soft upbringing, disturbances arising in the family constellation, the social milieu, etc. "Spiritual illness originates in a deepened feeling of inferiority which necessitates for its compensation an increased feeling of worth. The erroneous aim of the individual is caused and followed by a disturbance in neighborly relations."—A. Römer (Leipzig).

3709. Nichols, R. F. *The progress of the American negro in slavery.* *Ann. Amer. Acad. Pol. Soc. Sci.*, 1928, 140, 116-121.—The American negro was so handicapped under slavery that in spite of definite economic and social gains he was unable to make the necessary adjustment to Western culture quickly enough to be prepared for freedom in 1865. Modern negro problems are in a measure due to this fact.—(Courtesy *Social Science Abstracts*).

3710. Niles, K. E. *A survey and critique of young people's societies.* *Rel. Educ.*, 1929, 24, 526-535.—Young people's religious societies were found to be fairly well standardized and purposeless. They do not show initiative and understanding on the part of young people and are not adapted to the needs of the young. They reflect the general torpor of the churches.—J. P. Hylan (Stoneham, Mass.).

3711. Oldham, C. E. A. W. *The Gadaur festival in the Shahabad district, Bihar.* *Indian Antiquary*, 1928, 57, 137-140.—This festival, which has a wide spread in northern India, especially among the cowherding Ahirs, has as its central feature the inciting of the cattle to gore to death a pig, which is then consumed. This is remarkable, as under normal conditions domestic pork is eaten only by the most despised castes. In those places where Vaisnavas—who refrain from taking life—are predominant an artificial pig is used. The festival is held after the heavy work in the fields is finished and is accompanied by much drinking and merriment. Its wide spread, the substitution of an artificial animal in some regions, and the eating of prohibited flesh all point to a remote origin. It is suggested that it may have had its origin in a belief in the fertilizing power of blood. Native rationalization gives as its purpose a treat to the cattle after their toil in the fields.—(Courtesy *Social Science Abstracts*).

3712. Pangburn, W. *Leisure time agencies and character building.* *Rel. Educ.*, 1929, 24, 572-577.—Here are briefly described the better known organizations for the purpose of character building in the young. The Y. M. C. A., Boy Scouts, Boys' Club

Federation, Columbian Squires, Campfire Girls, Girl Reserves, Playground and Recreation Association of America, Woodcraft League of America, and others are mentioned.—J. P. Hylan (Stoneham, Mass.).

3713. Penard, A. P. *Het Pujai-Geheim der Surinaamsche Caraïben.* (The Pujai-secret of the Surinam Caribs.) *Bijdragen tot de Taal-, Land- en Volkenkunde v. Nederlandsch Indië*, 1928, Part 84, 625-671.—A very elaborate description of the instruction and initiation of the pujai, or medicine man of Surinam. The information was volunteered to the author by a pujai of the Lower Maroni, who had gone through the course of instruction at the age of 18 after he had passed five years of a semi-civilized life at the store of a French trader. There are four kinds of pujai: those that manage to fall in a trance without taking any narcotics at all, those that take tobacco-water, or the juice of the takini-tree, or an infusion of pepper. The names of the pujai vary according to the means they use to attain the trance. The candidates remain 24 days and nights in the initiation lodges and are taught by an old medicine man all the songs and lore pertaining to the profession. During his stay in this lodge, every candidate has assigned to his personal service a girl of the village—she must be a virgin—who brings his food and washes and paints him regularly. The ceremonies observed, and the information imparted to the candidates is mainly devoted to a description of the multifarious spirits and ghosts which the natives believe in, and the means by which they can be summoned to the assistance of the pujai. After the completion of the course of instruction, ceremonies take place that restore the ex-candidate, now a full-fledged pujai, to the community and that lift the tabus he had to observe. (Texts with translations of all the songs accompany the paper; no musical notation is given.)—(Courtesy *Social Science Abstracts*).

3714. Phelps, H. A. *Cycles of crime.* *J. Crim. Law & Crimin.*, 1929, 20, 107-121.—Total crime may be divided into four subdivisions: crimes against the person, against property, against sex morality, and miscellaneous crimes. Poverty may be indicated by indoor poor relief (aid to unemployed casual labor, generally single men), and outdoor relief (aid to poor families). Records of the superior court of the two most populous counties of Rhode Island for the period 1898-1926, corrected for population increase and general trend, provide an index consisting of variations in the trend of the crime rate, which when compared with a similar index of poverty (from the records of the Department of Public Aid, Providence, R. I.) reveal the following correlations: (1) between total crime and total poverty, +.33; (2) crimes against property and total poverty, +.357; (3) outdoor poor relief and total crime, +.27; (4) outdoor relief and crimes against property, +.326; (5) outdoor relief and miscellaneous crimes, —.27; (6) indoor poor relief and crimes against the person, +.30; (7) indoor relief and crimes against sex morality, +.30; and (8) indoor relief and miscellaneous crimes, +.346. Omitting the first three years (1898-1900) raises the first four coefficients to +.41,

+ .436, + .36, and + .447 respectively. Proof as to the causal relationships of these social factors, however, depends as much upon analysis of individual cases as upon statistical evidence. Any considerable extension of general social well-being will hinge immediately upon further analysis and control of the business cycle.—*G. L. Barclay (Nebraska)*.

3715. Phillips, U. B. The central theme of Southern history. *Amer. Hist. Rev.*, 1928, 34, 30-43.—"Southernism," the peculiar scheme of life and thought of that part of the American people living south of the Mason and Dixon line, is not primarily the result of selective immigration, a peculiar economic system, language or religion. Neither can it be explained by such terms as state rights, free trade or slavery. The unity of the South lies in the common resolve that it "shall be and remain a white man's country." Slavery was maintained not only as a vested interest, but also as a guarantee of white supremacy and civilization. This alone explains the willing acquiescence of the bulk of non-slaveholders in slavery and secession. The aggressive insistence on "Southern rights" just prior to the Civil War as well as the various political and legal subterfuges adopted at the close of the reconstruction period had one common purpose—to keep the South a white man's country.—(Courtesy *Social Science Abstracts*).

3716. Quinn, A. H. Democrats and Republicans. *Virginia Quar. Rev.*, 1928, 4, 351-358.—The two parties in this country are composed of citizens of two radically different political, social, and emotional philosophies. The Democratic group is keenly responsive to the appeal of leadership. Once being satisfied that the man in question may be trusted, they will follow him through defeat or victory with equal loyalty. He must have touched their imagination by some quality that has appealed to their primitive instincts, and qualities which have most often made that appeal have been courage and a sympathy with the man or woman who labors either with hands or brain. At the root of this loyalty is the feeling of the clan, of the feudal spirit. The other type of voter, the Republican, is more interested in institutions than in personalities. He is distrustful of brilliant men, but if a candidate is presented who is safe, who is possessed of common sense, and who believes in the sanctity of property, he will be supported. The greatest source of strength to the Republican-minded group is a feeling that has come down to it through centuries of Teutonic ancestry—the less government the better. Republicans like an executive who will check rather than lead.—(Courtesy *Social Science Abstracts*).

3717. Ramadas, G. Marriage customs in South India. *Man in India*, 1928, 8, 136-145.—The author tries to show (1) that in former times a wedding took place after the girl reached the age of puberty, and (2) that abduction of the bride was a widespread custom. At present child marriages are common, but the ceremonies observed in these marriages are merely a pretense that the small boys and girls are husbands and wives; the real nuptial marriages

are put off until they reach the age of discretion. The child marriage originated in the priestly class, and other castes as well as the non-Aryan Dravidians imitated them. The practices of pretended abduction of the bride show that in former times this was really in vogue.—(Courtesy *Social Science Abstracts*).

3718. Rogier, E. *Atmung und Ausdruck. Ein Beitrag zur Psychophysik des Sprechens.* (Breathing and expression. A contribution to the psychophysics of speech.) Breslau: Trewendt & Granier, 1928. Pp. 48. M. 2.—Physiological investigations of breathing movements are made for the purpose of determining limits and averages, in brief, the norm of the human type of breathing. However, the biological norm as function of the class in natural history is a presupposition, not an aim, of physiological investigation. An experimentally obtained pneumographic curve shows that individual character is comprehended only by qualitative comparison. The individual breathing curve is at the same time a representation of the totality of all organic functions. The concepts individual, class, and norm fall together. The relation between objectivity and subjectivity or experience becomes concrete in the individual character. Every special physiological determination stipulates a special psychological question, and vice versa. What psychological problems are then to be discussed in regard to breathing (breathing curves)? The phenomena of expression are related to central stimulation. The meaning of intentional and unintentional and of conscious and unconscious breathing should be cleared up. A specially characteristic form of breathing is shown to be the breathing during articulation. Definite changes of the curve of breathing during articulation must suggest particular problems of vocal expression. In the experiment (again through qualitative comparison) the meaning of the sentence is defined in connection with the phase of breathing, the production of sense with the distribution of breathing. Sound, syllable, or word may bear the meaning of the sentence, etc. The breathing curve is shown to be a practical instrument for exact investigation of definite speech phenomena.—*E. Rogier*.

3719. Roy, S. N. *Stree-Achar in West Bengal. Man in India*, 1928, 8, 182-190.—The Hindu marriages are performed with shastrie rites and incantations of Mantras. Shashtra is called the collective amount of Hindu laws and teachings. Mantras are the Vedic hymns. Along with shastrie rites a body of customary rites, known as stree-achar, have grown up. In this article a description of stree-achar is given as they are performed among the upper castes of West Bengal the day before the marriage, the day of marriage, and the day after marriage. There is also a ceremony in the afternoon or evening of the day after marriage, when the married couple are about to depart for their home, and another ceremony on the third evening after marriage, when the married couple come into the bridegroom's house. On that night the married couple are finally left to themselves.—(Courtesy *Social Science Abstracts*).

3720. Schairer, J. B. *Psychognostische Aufhellung religiöser Abnormitäten*. (Psychognostic elucidation of religious abnormalities.) *Zsch. f. Religionspsychol.*, 1929, 2, 29-41.—Schairer briefly presents nine cases from his pastoral practice in which he tries to emphasize only the abnormalities. He concludes: "A pastoral practice which feels that it must and wants to go beyond a purely psychological diagnosis to a normative and corrective work, acts wholly wrongly and in vain if it enters the dangers of a purely theoretical debate. In the logical reconstruction the eccentric has merely built himself a glittering 'fort.' To overcome him there does not mean to vanquish him. . . . It is the business of parishes to therapy to correct the subliminal determinant."—A. Römer (Leipzig).

3721. Schjelderup-Ebbe, T. *Overhöihetsformer i den menneskelige sociologi*. (Forms of dominance in human sociology.) *Ark. f. Psykol. o. Ped.*, 1929, 8, 53-100.—"This treatise has a double purpose: first, it tries to show that peace between nations and individuals is dependent upon laws of mutual relations; next, it attempts to give a contribution to the knowledge of the main forces in sociology."—M. L. Reymert (Wittenberg).

3722. Scripture, E. W. *Experimentelle Untersuchungen über die Metrik in Beowulf*. (Experimental investigation concerning meter in *Beowulf*.) *Arch. f. d. ges. Psychol.*, 1928, 66, 203-215.—With the help of a speech recorder the opening lines of *Beowulf* were analyzed, the kymographic record being reproduced in the text. The results of the analysis of this and other parts of the poem lead the author to the following conclusions: There are four accents in each line, never less and a few times more. The number and distribution of the unaccented vowels are irregular. Accents are placed as they would be in prose. There is no justification for dividing the line into two halves, as is usually done.—K. F. Muenzinger (Colorado).

3723. Scripture, E. W. *Äusserungen deutscher Dichter über ihre Verskunst*. (Utterances of German poets on the art of versification.) *Arch. f. d. ges. Psychol.*, 1928, 66, 216-251.—30 German poets were asked to answer a list of 14 questions in regard to their versification. Their answers are given in the article. The author concludes that the unconscious is the real source of the structure of the verse. The writing of poetry is an activity which arises from an inner pressure and which affords relief.—K. F. Muenzinger (Colorado).

3724. Seifert, P. *Experimentell-psychologische Untersuchungen über die Reproduktion von Intervallen*. (Experimental-psychological investigations concerning the reproduction of intervals.) *Arch. f. d. ges. Psychol.*, 1929, 67, 307-436.—This study intends to furnish a psychological foundation for a method of teaching singing at sight. The experiment consisted in presenting to the observers, of whom there were 14 adults, musical intervals in various ways, starting with a minor third and later combining others, asking for a reproduction in various ways, and introducing musical notations gradually and with

many repetitions. In a supplementary experiment children of 10-12 years were used. The results are discussed with reference to a method of teaching singing at sight and to the problem of musical ability. There are a number of factors which contribute to the singing of correct intervals. A supply of songs with characteristic intervals is advantageous. Reproduction is furthered by the presence of certain schemata for the various intervals and by the formation of a system of intervals.—K. F. Muenzinger (Colorado).

3725. Shaw, C. R. *Does the community determine character? (II). Delinquency and the social situation*. *Rel. Educ.*, 1929, 24, 409-417.—During the year 1926 a total of 9,243 alleged delinquent boys were dealt with by police officers in the city of Chicago. 50% of these were from 19.2% of the total area of the city, the other 50 came from the remaining 80.8% of area. The greatest concentration of delinquency was found around the Loop and in general this decreased in going towards the outskirts of the city. The vicinity of the Loop is characterized by marked poverty and social disorganization. Stealing was found to be practised largely in gangs in which crime was a treasured social tradition, while certain types of offences were localized in certain areas of the city.—J. P. Hylan (Stoneham, Mass.).

3726. Stieler, G. *Person und Masse: Untersuchungen zur Grundlegung einer Massenpsychologie*. (The individual and the crowd: investigations for the foundation of a crowd psychology.) Leipzig: Meiner, 1929. Pp. viii + 239. M. 11.—One of the most significant problems of the present is the "problem of the crowd," especially since it reaches into almost all realms of life. While most sciences occupy themselves either explicitly or implicitly with individuals or their achievements, (for instance they construct individual subjects or use them as hypothetical figures of actual events) a conscious direction to collective objects is absolutely essential for the scientific grasp of the life-whole. Sociology (and its applied branches) does this, but it lacks too much a philosophic basis. This book has set itself the problem of founding, philosophically, collective being and occurrence in a partial realm, that of crowd psychology in the narrower sense. From this basis the author then points to more inclusive problems. The first part contains preliminary investigations on collectivity and collective life. The second part investigates, on the basis of a concrete example (public meeting) the essence of the crowd and the uniqueness of crowd activity. The third part outlines the inner structure of the group.—G. Stieler (Freiburg i. Br.).

3727. Strong, W. D. *Cross-cousin marriage and the culture of the northeastern Algonkin*. *Amer. Anthropol.*, 1929, 3, 277-288.—This is a study of three bands of Naskapi, the most northeasterly of Algonkin groups. A discussion of cross-cousin marriage and kinship terminology precedes an account of the general culture of the group. They worship the caribou god and the principal rites and tabus center about this animal. Mythology is meager but tells of a race

of child stealers invisible to all but sorcerers. Symbolism is poorly developed and art is almost entirely for purposes of decoration, not for religious or magical purposes. Guardian spirits are largely confined to conjurers. Fasting or definite seeking for guardian spirits is limited to potential conjurers. Shamanistic powers are entirely the result of personal predispositions and are not inherited, though they may be passed from one living man to another. Dreams are regarded as personal communications from the caribou god and control the activities of everyone. Material culture is quite simple, depending upon the presence of wood. There is no concept of definite hunting territories, and the chieftainship, usually vested in the oldest man of the group, is of little importance.—*C. M. Diserens* (Cincinnati).

3728. Swackhamer, G. V. The advantages of co-operation between justices of the peace and a social agency. *J. Crim. Law & Crimin.*, 1929, 20, 122-135.—The twenty-five justices of the peace in Baltimore County, Md., comprise a heterogeneous group, representing various classes and interests of society, and actuated by various motives in entering upon the work. Three factors limiting the justice in his work are personal bias, lack of training, and public opinion. Forces which have encouraged cooperation between the justices and the Maryland Children's Aid Society during its fifteen years of existence are: the work of the Society, the work of the Juvenile Court, and the social viewpoint of the State's Attorney. The nature and degree of cooperation is illustrated by ten short case studies.—*G. L. Barclay* (Nebraska).

3729. Titus, C. H. Rural voting in California, 1900-1926. *Southwestern Pol. Soc. & Sci. Quar.*, 1928, 9, 198-215.—The writer used election statistics in twenty-three rural counties. He took into account the estimated population in each county each year, the estimated potential voting population, and the absolute number of votes cast at succeeding elections within the period. He was concerned with the vote cast for presidential electors, for governor, for congressman, and for state assemblyman. With these two population series before him he discovered the votes cast per thousand of population, and the votes cast per thousand of voting population. Subjecting this material to statistical methods, it was possible to arrive at various conclusions concerning tendencies. These tendencies are made clear in a number of tables. He arrives at eighteen distinct conclusions such as: The trend of absolute voting for the twenty-three counties, taken together, has been definitely upward during this period. The largest vote cast in a given election will be cast for president in the general national elections, and for governor in the general state elections. These results suggest that rural communities are slightly more interested in state problems than in national ones. From the standpoint of absolute voting, the larger the population of the rural area, the larger the vote cast. In general it can be said that as a county became larger in voting population, the relative vote cast became smaller.—(Courtesy *Social Science Abstracts*).

3730. Tjaden, J. C. Tjaden analytical interview for the study of individual delinquency and problem cases. Chicago: Stoelting, 1929.—A case record manual for clinical psychologists, psychiatrists, state and private training schools for juveniles, state and private asylums for the insane, juvenile courts, psychopathic research hospitals, state prisons, child guidance clinics, social workers, and graduate research students. This analytical interview is in no sense a test, but it is distinctly a device for the purpose of enabling the psychologist and other trained workers to explore the patient's mental life and to construct a working psychogram on the basis of the data thus secured. The interview consists of twenty-two sections, over which are distributed six hundred pertinent questions designed to furnish the analyst with a complete picture of the factors that have contributed to the patient's antisocial or other abnormal conduct. Space is provided for the written insertion of the data secured on each question, thus providing a permanent record for institutional filing or for research material in the hands of the scientific investigator. A single copy is employed for each case, the result being an intimately personal and comprehensive history. The interview contains graded psychological approaches to every department of life experience, grouped under five major captions on both mental and physical levels. Space is provided for the records of mental tests; of a battery of fifteen performance tests; of the Pressey X-0 tests; and of the standard association test. Further, there is a short test for the determination of school grade in cases where this item is not known. There is appended a complete schematic list of psychopathological symptoms for rapid checking, comparison, and recapitulation, with spaces for diagnosis, differential diagnosis, prognosis, disposition of case, staff comments, and examiners' signatures. A manual of directions accompanies the interview.—*J. C. Tjaden* (South Dakota).

3731. Todd, A. J. The future of the family. *Rel. Educ.*, 1929, 24, 480-482.—The family is here to stay. All its possible variations have been tried out. Companionate marriage is only a thin veil for prostitution. Religion is the only factor that can improve family relations.—*J. P. Hylan* (Stoneham, Mass.).

3732. Underhill, E. Ricardus Heremita. *Dublin Rev.*, 1928, 183, 176-187.—The author bases this study of Richard Rolle of Hampole upon the recent volume by Hope Emily Allen (*Writings ascribed to Richard Rolle, Hermit of Hampole, and materials for his biography*, Oxford Univ. Press, 1928) and upon certain of the works of Rolle. Miss Allen's work revolutionizes the current view of the distinguished mystic. In Rolle an aggressive egoism slowly yielded place to self-oblivious spirituality. Born about 1300, he died in the plague year of 1349. After four years at Oxford, he made over two of his sister's frocks into a hermit's robe, and made his strange hermitage of a room in a nobleman's castle. Sharp dissension with his host did not prevent "the heavenly door" of mystical experience opening to him; but during a

year of spiritual radiance he found another retreat. There is some indication of a period of study at the University of Paris, where Eckhart's mysticism had taken root. Intense mystical experiences followed, such as that described by himself as "an unwonted and pleasant heat"—an expression which has equivalents in the language of other mystics and cannot be explained as psycho-physical automatism. Rolle thought he had attained to perfect sanctity; but this elevation was apparently followed by some misgivings, and certainly by years of devoted work as a scholar and spiritual adviser. His mysticism was characterized by lyrical joy and by impassioned devotion to the Holy Name.—(Courtesy *Social Science Abstracts*).

3733. Vogt, —, von Bock, —, & Polach, L. Über das Religiöse im Frauenbewusstsein. (The religious factor in the feminine consciousness.) *Christengemeinschaft*, 1928-29, 5, 355-359.—The specifically religious factor in the female consciousness of today differs from that of women in past centuries. This difference is "that we continue to be conscious of a final immanent responsibility."—A. Römer (Leipzig).

3734. Waller, W. A deterministic view of criminal responsibility. *J. Crim. Law & Crimin.*, 1929, 20, 88-101.—A reply to an essay of C. O. Weber, *Pseudo-Science and the Problem of Criminal Responsibility* (*J. Crim. Law & Crimin.*, 1928, 19, 181-195), in which the following argument was presented: (1) The deterministic system of thought, based as it is upon the underlying hypothesis of determinism, starts with a bare assumption. (2) By appeal to the facts we discover: (a) that certain facts which are advanced by the determinists as proof of their beliefs are not such, and (b) that certain manifestations of the human personality, i.e., choice and effort, seem to be outside the sphere of causal laws. (3) From the above we may derive a defense of the present system of criminal justice. Waller's reply is an attempt to show the relative superiority of determinism for (1) the understanding of the facts of human experience, and (2) the control of human behavior. So far as we are able to understand human behavior, we know it to have a deterministic basis, but where we do not understand, some of us prefer to say that free will is operative. The doctrine of free will is not based upon proved errors or failures of determinism, but upon its lacunae. The attempt of the law to attain opposed and inconsistent ends by punishment, in addition to its preventive and reformatory efforts, robs it of its effectiveness. From the deterministic point of view, the concepts of guilt, retributive justice, punishment, and responsibility become meaningless. A scientific (deterministic) attitude toward crime and criminals would render the law consistent and effective.—G. L. Barclay (Nebraska).

3735. Wells, R. H. Non-voting in Germany. *Hist. Outlook*, 1928, 19, 267-269.—German election statistics indicate a growing problem of non-voting. In America, non-voting is due to the burdens placed upon the electorate; to plurality elections; and to a declining interest in politics generally. The first of

these reasons does not apply to Germany because of permanent registration, the short ballot, and less frequent elections. Instead of plurality elections, proportional representation, which stimulates the parties to get out the vote, is everywhere used. But proportional representation discourages voting by encouraging numerous small parties and by compelling the voter to vote for the party and not for individual candidates. Indifference to politics is less widespread than in America, but it exists, especially among women. Get-out-the-vote organizations have recently been formed in several German cities. If the voting ratio continues to decline, compulsory voting, which already exists in two states, will be seriously considered.—(Courtesy *Social Science Abstracts*).

3736. Wilson, C. M. Backhill culture. *Nation*, 1929, 129, 63.—"The backhills have their intellectual life . . . sensitive spirits and brilliant and appreciative minds . . . dynamic philosophies . . . a literature of speech . . . with the profound simplicity of uphill living."—M. Goodrie (Clark).

3737. Wood, M. M. Mental test findings with Armenian, Turkish, Greek and Bulgarian subjects. *J. Appl. Psychol.*, 1929, 13, 266-273.—Using the Otis Self-Administering Test of Mental Ability (Higher Examination, Form B) with 120 subjects of the sophomore, junior and senior classes in the Constantinople Woman's College the writer found the students of different nationalities to rank according to IQ in the following order: (1) Bulgarians, (2) Turks, (3) Armenians, and (4) Greeks, with a median IQ of 95 for the group as a whole. A thorough testing program is needed in order to establish norms for this group of students, since they suffer from handicaps in language and training and consequently cannot be compared on the basis of this test with American students.—G. L. Barclay (Nebraska).

3738. Zemen, K. Sprachkurven von "hier" mit drei verschiedenen Gefühlsbetonungen gesprochen. (Speech curves of "hier," pronounced with three different affective accents.) *Arch. f. d. ges. Psychol.*, 1928, 66, 493-496.—The German word *hier* was spoken into Scripture's speech recorder in three different ways, first as a quiet answer, then as a reassuring question, and lastly as a cross and impatient answer. The speech curves are analyzed separately and compared with each other.—K. F. Muenzinger (Colorado).

3739. Zemen, K. Experimentalphonetische Untersuchung des Metrums von Goethes Spruch: Gottes ist der Orient! (Experimental-phonetic investigation of Goethe's line: *Gottes ist der Orient!*) *Arch. f. d. ges. Psychol.*, 1928, 66, 501-505.—The author himself spoke this line of Goethe's into Scripture's speech recorder and analyzed the speech curve thus obtained.—K. F. Muenzinger (Colorado).

3740. Zimmerman, C. C. Incomes and expenditures of village and town families in Minnesota. *Univ. Minn. Agric. Exper. Sta.*, 1929. Pp. 47.—A comprehensive survey and comparison of living con-

ditions in every social class among village and town families in Minnesota.—*M. Goodrie* (Clark).

[See also abstracts 3462, 3472, 3484, 3516, 3547, 3554, 3559, 3565, 3575, 3582, 3598, 3777, 3788, 3801, 3808, 3813, 3816, 3848, 3856, 3904.]

#### INDUSTRIAL AND PERSONNEL PROBLEMS

3741. Anderson, R. N. Rates of promotion in Army and Navy: A personnel study of officers of highest rank. *Person. J.*, 1929, 8, 36-46.—To obtain information regarding the rapidity with which promotions come in the Army and Navy, an examination was made of the vocational histories of all those officers having attained the permanent rank of brigadier-general, major-general or rear-admiral (total 350). The data for the investigation were gathered from *Who's Who in America*. Tabulations show the median age at which these officers received appointment to each of the ranks leading to their final status. Vocational ladders are made representing the histories graphically. These figures show that the amount of time required to travel from second lieutenant to major-general was, on the average, 37 years; and that the amount of time required to travel from ensign to rear-admiral was, on the average, 35 years. The period of time spent at each rank is also shown.—(Courtesy *Person J.*)

3742. Back, J. Zum Verhältnis der neueren Wirtschaftstheorie zur Psychologie. (The relation of the newer economic theory to psychology.) *Jahrb. f. Nationalökonomie u. Statistik*, 1928, 74, 1-32.—The historical and marginal utility schools in different ways emphasized the supposed psychological foundations of economics, but modern writers like Weber, Liefmann, Diehl, and Schumpeter are now nearly unanimous in disclaiming reliance on psychology. Even Wieser has repudiated his earlier designation of economics as "applied psychology." Neither sensations nor feelings nor conations can be the specific source (*Ursprung*) of economic life, for they are interwoven, contribute to non-economic activities, and do not contain the rational character which is essential to business. They are merely conditioning factors. The actual foundation, in terms of which economic affairs may be explained, is a subsidiary of Kant's "practical reason." The latter alone tells us only what is ethical, not what is also commercially possible or profitable. Since economizing, balancing costs rationally against returns, is a universal type of human behavior, we must assume the existence of a faculty which may be called the "practical economic reason." The authors referred to are all German or Austrian.—(Courtesy *Social Science Abstracts*).

3743. Bakker, J. De kantoorbediende in het bedrijfsleven: een aanlokkelijk beroep. (Office workers in business.) *Jeugd en Beroep*, 1928, 1, 115-119.—Office work is a desirable vocation because it has been specifically bounded and recognized by society; furthermore, it is comparatively easy for children to get a "job" in some office and work up to a position of trust and power, without much preliminary

education. Then, too, individuals may take up office work after having worked in other fields. The above is preliminary to an extended discussion of the subject.—*E. Winter* (Holland, Mich.).

3744. Bakker, J. De kantoorbediende in het bedrijfsleven. II. De groote vergaarbak. (The office clerk in business life. II. The great catch-basin.) *Jeugd en Beroep*, 1928, 1, 142-146.—The writer points out that a certain attractiveness, which is only of an external nature, draws many into office work. Many find a place here not on the ground of deliberate choice, but of considerations which are entirely foreign to it. It is argued that only a definite bent of the intellect can guarantee success and happiness in this vocation. In this way this vocation will no longer be a catch-basin.—*H. Hospers* (Western Theological Seminary).

3745. Beckman, R. O. The improvement of morale in the Cincinnati city service. *Pub. Person. Stud.*, 1929, 7, 57-58.—Under a city manager morale among municipal workers has been improved by standardizing classifications of jobs and pay, placing efficiency ratings on a workable basis, improvements in the schedules of hours of work, vacations and sick-leaves, attention to the retirement plan, modifications in system of transfers and promotions, giving consideration to problems of compensation and safety, and the organization of recreation and group conferences.—*K. M. Cowdery* (Stanford).

3746. Blackett, O. W. Factory labor turnover in Michigan. *Mich. Bus. Stud.*, 1928, 2, No. 1. Pp. 38.—The regional and industrial labor turnover results for Michigan together with an index of employment and methodology.—*N. L. Munn* (Clark).

3747. Bur. Pub. Person. Admin. Staff. Information and data regarding tests in the short answer form. *Pub. Person. Stud.*, 1929, 7, 64-66.—(1) Police sergeant. Distribution of scores for 167 Minneapolis testees indicate that the test material is too easy for best results. Correlation with Alpha .71. (2) Junior clerk. Set F used in Maryland in 1928 gave results similar to those from previous forms of same test. (3) Senior clerk bookkeeper. Milwaukee use with 44 testees gave reliability coefficient of .89. (4) Police officers in Grand Rapids. Ratings of appearance and personality were supplemented by intelligence and aptitude tests. Distribution of intelligence test scores given.—*K. M. Cowdery* (Stanford).

3748. Bur. Pub. Person. Admin. Staff. Suggested tests for senior statistical clerk. *Pub. Person. Stud.*, 1929, 7, 59-63.—As yet unstandardized tests are described to use in selecting clerks to handle statistical tabulations and computations under relatively little supervision. The suggested material proposes to measure memory for oral directions, knowledge of statistical principles, terms and methods; ability to prepare tabulations, knowledge of the meaning and use of punch card codes, ability to make ordinary statistical calculations, and the ability to understand and follow written directions. The educational and

employment records are recommended as supplements.—*K. M. Cowdery* (Stanford).

3749. Cavan, R. S. *Business girls; a study of their interests and problems.* Chicago: Religious Educational Association, 1929. (Monog. No. 3.) Pp. 95.—This study has for its purpose the assembling of facts about the normal young business woman in such a manner that they will be of value to other workers in comparing the results of their researches, as well as to yield material which may be utilized in organizing programs for church, clubs, and classes. It also aims to point out the needs of individual girls which may be met by older women who are properly trained. The investigation was carried on as much as possible with girls coming from homes with an American background. The group was limited to unmarried business girls not over 30 years old. It is a somewhat selective group, being made up in large part of girls having some contact with the Y. W. C. A. There are five bibliographies. The first is a short bibliography on girls; the others deal with the need for a mental hygiene program, budgets, vocational guidance, and a general bibliography of material to which reference was made in the study. Appendix 1 gives in detail the questionnaire which was used at the Camp Gray business girls' conference in 1927. Appendix 2 is a form sheet used for general information. Appendix 3 gives the budget and vocational history sheet used in the survey. A check list of interests, activities and problems is given in the fourth appendix, while Appendix 5 gives the questionnaire used in 1928 at the Camp Gray business girls' conference. An outline to be used in the interview completes the monograph.—*H. S. Clapp* (Southboro, Mass.).

3750. Ebel, W. *Ein Beitrag zur Psychologie des Industriekindes.* (A contribution to the psychology of the child in industry.) *Vjrsch. f. wissenschaftliche Päd.*, 1929, 5, 45-54.—*A. Römer* (Leipzig).

3751. Giese, F. [Ed.] *Arbeits- und Berufspsychologie.* (Psychology of work and profession.) *Handb. d. Arbeitswiss.*, 1928, 5, Part 1. Pp. 232.—As a part of the 10-volume *Handbuch der Arbeitswissenschaft*, Vol. V is devoted to the psychotechnics of the object and continues in this way. Vol. IV (vocational tests). Vol. V will appear in 3 parts, of which this publication is the first. It presents the foundation for the psychology of work and profession. Schilder (Vienna) discusses in it the medical science of character, Fabian (Halle) the psychological knowledge of character. Eliasberg (Minden) devotes himself to the psychological concept of work on hand of Kraepelin's "work curve." Bogen (Berlin) presents a monograph on knowledge of profession and work and considers, on the basis of new studies, also such vocations as that of the butcher, the clothing worker, and the mannequin. Langenberg (Düsseldorf) completes these studies by a contribution on vocational guidance in general. Finally, Plaut (Berlin) leads on to the discussions of the second part by treating intensively the theme of collective psychology and work. Everywhere care is

taken to provide extensive references.—*F. Giese* (Stuttgart).

3752. Giese, F. *Psychotechnische Erfahrungen in der Personaldiagnose.* (Psychotechnical essays in personnel diagnosis.) *Arch. f. Psychiat.*, 1928, 85, 538-585.—The author describes approved diagnostic methods and his experiences with them as far as they are of importance for psychotherapy. He discusses (1) the psychological profile according to Rossolimo, and (2) the sample (work) test as an observation of the behavior of a person, approaching the method of behaviorism. Giese believes that with the help of this method it is possible to penetrate also to deeper mental levels, the qualities of character and temperament. (3) The spontaneous test, the observation of a subject that has been left alone and believes himself unobserved.—*O. Graf* (Munich).

3753. Giese, F. *Wirtschaft und Psychotechnik.* (Industry and psychotechnics.) Erfurt: Stenger, 1929. Pp. 28. M. 2.—A lecture which gives a review of the development of industrial psychology in Germany in the last decade. After an historical statement the results of subjective and objective psychotechnics are described, and an international cross-section of the status of psychotechnics in Germany and foreign countries is given. The basic theoretical problems of industrial psychology are stated, and referred to a special field of applied or general psychology. The concluding chapter is devoted to the dynamic relations of industry. In the whole relationship psychology plays only an auxiliary rôle, not an immediately decisive one. There is developing an industrial science which is based equally on technology, law, pedagogy, philosophy and biology, in which rôle psychology is more closely connected with medicine than before; the more so since for various reasons the significance of medically oriented psychology will be emphasized in the future. Bibliography.—*F. Giese* (Stuttgart).

3754. Grimes, W. H. *The curse of leisure.* *Atl. Mo.*, 1928, Sept., 355-360.—Severe competition has led to cost cutting by increasing production with a given force of men. This leads to unemployment, which is increased during hard times, since people ordinarily buy more than they need. The unemployed have too much leisure and face the problem of existence. Some have small leisure and face the problem of existence. Some have small farms which make them semi-independent; others drift away; many are misfits. The final result will probably be two types of peasantry: one with small independent farms, the other attached to the wealthy.—(Courtesy *Social Science Abstracts*).

3755. Grüb, A. *Zur Psychologie der Eisenbahnunglücke und Eisenbahnunfälle.* (A psychological study of railroad disasters and mishaps.) *Arch. f. d. ges. Psychol.*, 1929, 69, 207-282.—The author has made a study of 100 railroad accidents from the court records, selecting those occasioned by personal neglect. He proposes to find the psychological basis for disasters of this kind. The larger number of accidents were found to be due to inadequacy of dis-

tributive attention, lack of concentration, of caution, and of foresight, forgetfulness of responsibility, lack of deliberation, of observation, of comprehension, of response to directions, and of presence of mind, inability to resist diversion, and indecision. Good presence of mind and ability to make quick decisions and reactions avert both railroad disasters and industrial mishaps. The findings of this study are in agreement with those of Karl Marbe, psychological expert in the investigation of industrial accidents.—*A. B. Herrig* (Mount Pleasant, Mich.).

3756. **Hackett, J. D.** *Labor management*. New York: Appleton, 1929. Pp. xviii + 681. \$5.00.—The book is a summary of the methods of personnel administration and is a practical rather than a theoretical treatise. On the details of personnel administration, the author reviews the current practices, discusses their nature and the extent of their use, analyzes their advantages and disadvantages, and explains how the purpose in view may best be attained. The selection of workers is discussed with particular emphasis upon the various phases of the interview. In connection with the determination of character the inadequacy of Blackford's system, phrenology, physiognomy, and graphology is pointed out. Tests for the workers are considered in two main classes, physical tests and mental tests. Several typical trade tests are presented with illustrations of the materials required. The use and construction of intelligence tests is discussed briefly. Clerical tests are also considered. Various types of ability and performance rating are discussed and the graphic rating scale system is presented. A few of the many other topics considered are: the employment department, the labor supply, job analysis, stabilizing the new employee, transfer and promotion, labor turnover, training of workers, and various phases of the wage problem. Many charts and illustrations are included.—*L. W. Gellermann* (Clark).

3757. **Heijermans, I.** *Het meisje en haar beroepsvorming. III.* (The girl and her preparation for a vocation.) *Jeugd en Beroep*, 1928, 1, 120-122.—A discussion of conditions of labor for women. The race whose mothers have spent their young lives in modern factories will die morally unless the realization comes that labor in a factory must and can be other than the stupefying and deadening task that it is now.—*E. Winter* (Holland, Mich.).

3758. **Heijermans, L. A. V. O. en de jeugd.** (Society for "Labor for Inefficients" and youth.) *Jeugd en Beroep*, 1928, 1, 113-114.—Announcement of the Congress and Exhibition to discuss the problem of labor inefficiency. V. d. Ploeg fears that youth and the pedagogical phase of the question will not receive sufficient attention. The purpose of the conference is to interest the industrial world. Though all questions cannot be fully treated, the conference will awaken interest and prepare for the future.—*E. Winter* (Holland, Mich.).

3759. **Kingsbury, F. A.** *Character and employment*. *Rel. Educ.*, 1929, 24, 578-582.—The average employer cares little about character except as it affects the employee's relations with his fellow work-

ers, with customers, his employer and his work. Effective supervision serves to develop character. The supervisor comes to know intimately each person under his charge and to judge, instruct, advise and encourage him, thereby giving him tactful aid in overcoming faults and in doing his best.—*J. P. Hyland* (Stoneham, Mass.).

3760. **Kneeland, N.** *The interview in training salespeople. Techniques for instruction based on errors, ratings, and service shopping reports*. *Person. J.*, 1929, 8, 47-52.—A technique has been evolved for use of supervisors in interviewing salespeople about their ratings, their errors, and the reports made on their work by service shoppers. In this article are listed 11 difficulties encountered by such interviewers of salespeople, 10 characteristics of a successful interview on a rating or a service shopping report, qualifications of a successful interviewer, and general rules to observe for interviewing on ratings, on service shopping reports, and on errors. The points covered in the technique developed on the basis of these data are outlined briefly under the three headings: preparation for interviewing, the interview itself, and follow-up.—(Courtesy *Person. J.*)

3761. **Kölle, H.** *Psychotechnische Schulungsmethoden fuer Polizeibeamte.* (Psychotechnical training methods for policemen.) Halle: Marhold, 1929. Pp. 50. M. 1.90.—Though previous investigations have dealt with problems of fitness and selection, this book summarizes especially the methods which are suitable for promoting the qualities necessary for the vocation of policeman. Up to now it has not been sufficiently observed that apparently absent abilities may be only dormant, and that slightly developed abilities are capable of further development. For this reason the police school at Danzig emphasizes the idea that suitable psychotechnical training methods can supply these needs and train the mental powers. This book gives a detailed description of the training methods which have been developed and tested by years of practice. These methods emphasize the following qualities: capacity for observation, memory for persons, general memory, ability to repeat reports and orders, conceptual development and manner of expression, reasoning power (including power of judgment and logical thought), memory for places and for identification marks on automobiles. The results obtained so far, especially the value judgments given in this respect by former pupils and the practical achievements, prove that the introduction of a psychotechnical course fills a need in the training of policemen.—*H. Kölle* (Danzig).

3762. **Lucas, D. B., & Benson, C. E.** *The relative values of positive and negative advertising appeals as measured by coupons returned*. *J. Appl. Psychol.*, 1929, 13, 274-300.—Comparing 117 pairs of advertisements for manufactured products and educational courses on a basis of number of coupons returned and cost per coupon, it was found that (1) there is no evidence favoring positive as against negative advertising appeals, (2) the variations within positive or negative types of appeals are far

more important than the differences between the types, and (3) the most effective kinds of appeals for each product should be individually determined.—*G. L. Barclay* (Nebraska).

**3763. Municipal Administration Service. The selection of patrolmen in Syracuse.** *Pub. Person. Stud.*, 1929, 7, 54-56.—Selections based on character, local residence, and ages between 23 and 32 supplemented by tests dealing with medical conditions, education, experience, personal fitness, and a written examination dealt with 663 applicants in 1920-27. 66% failed, but only 1.5% on the written tests. Among the changes recommended were the minimizing of the weights assigned to education and experience until their significance is established, placing the intelligence test first as of highest significance. An IQ of between 90-110 has been found desirable or at least a score of 65 on the Army Alpha. Aptitude tests should evaluate memory, observation, reasoning and analytical judgment, ability to follow directions, to organize materials as in a report, mental alertness, and determination. Character investigations need to be in the hands of more competent workers.—*K. M. Cowdery* (Stanford).

**3764. Oberhoff, E. Die neuere Entwicklung der psychotechnischen Begutachtung.** (The recent development of psychotechnical prognosis.) Düsseldorf: Stahl und Eisen, 1929. Pp. 6. M. .90.—From among a great number of psychotechnical tests and under the guidance of Poppelreuter a new methodology is developing which is concerned with the human efficiency of entire vocational groups. Such groups are manual workers, laborers for heavy work, workers for fine work, chauffeurs and motormen, common clerks, as well as vocations with the simplest kinds of manipulations. Within a group differences are of no account, but are conditioned by training. Accordingly the tests are not scored on the basis of individual achievements, but a psychological judgment is formed about the "type of work." This type shows itself through continued behavior in the examination with standard tests. These are arranged in such a way that the candidate performs an actual piece of work, so that the objection that they are theoretical disappears. The results are transferred to the so-called work recording clock (*Arbeitsschauuhr*) of Poppelreuter, so that the work curve expresses the candidate's attitude towards the work in addition to his ability. The work curve also shows how far the candidate makes practical use of his ability. It does not give a result expressed in numbers, but represents a judgment. Of great importance here is the volitional attitude of the candidate, for example towards work requiring exactness, activity requiring physical exertion, or the ability to work for a long time uniformly in regard to speed and exactness. Similarly for motormen self-control is necessary, besides presence of mind, and above all, uniformity and reliability of reaction. Judgments on the basis of the work curve show a correlation of 85-90%.—*E. Oberhoff* (Villingen i. Schwarzwald).

**3765. Schoch, H. Industrielle Frauenarbeit.** (The work of women in industry.) *Die Frau*, 1928, 35,

716-723.—The employment of women in the period since the war has been affected by changes in industrial technique, the growth of new industries, and the efficiency movement. The recruiting of women in industry is coming to depend less upon the fact that they are a source of cheap labor and more upon their fitness for the work to be done. Vocational advice, the selection of workers by means of suitable tests of fitness for particular jobs, and trade education are all desirable for the young woman worker. Other matters, such as the need of protective legislation, the increase in wages, and preparation for household duties, must also be reckoned with in the working life of women.—(Courtesy *Social Science Abstracts*).

**3766. Taylor, D. H. Intelligence of young printers.** *Person. J.*, 1929, 8, 29-35.—The National Junior Personnel Service, in a recent survey of the adjustment problems of employed youth in Greater New York, had occasion to give the Otis Advanced Examination to several occupational groups, including more than 1,200 young printers. Composing room workers seemed unselected on the basis of the ability measured by the test. Pressroom workers, on the other hand, showed a marked inferiority in the ability measured by the test. There was some evidence that this difference might be due to experience requirements rather than to job requirements. The results seem sufficiently significant to warrant a more elaborate effort to determine the characteristics of successful workers in the trade. Such a study is in progress.—(Courtesy *Person. J.*)

**3767. Treat, K. Tests for garment machine operators.** *Person. J.*, 1929, 8, 19-28.—This article describes the method and gives the results of an attempt to measure by a series of psychological tests the aptitude of subnormal girls for power machine operating in the garment trades, and thereby to predict probable successes and failures. The tests were standardized on a group of girls from the New York City elementary schools. Every girl had an IQ of 70 or below on the Terman Revision of the Binet-Simon scale. Each girl was given 90 hours trial on the machines. A team of 5 tests showed a positive correlation of  $.66 \pm .04$  with the ability to learn operating and would have eliminated 76% of the failures if given in place of actual trial on the machines. There are other factors eliminating failures for this group, such as emotional instability and a mental age below 8 years.—(Courtesy *Person. J.*)

**3768. Van Eden, P. H. Compensation and rehabilitation of the injured civilian workers in Holland.** *Rehab. Rev.*, 1928, 2, 214-219.—Although compensation for accidents is very well regulated in Holland, no important work has yet been done in rehabilitation. The chief problem involved in rehabilitation is that of adaptation, which may be said to have been attained when the individual succeeds in establishing unconscious automatic action in place of making conscious, deliberate movements. Adaptation varies widely according to the nature of the injury. In the case of amputated fingers the percentage of individuals attaining complete adaptation

varied from 46% in the case of the thumb to 78% for the little finger. Of all persons suffering injuries to fingers or hands, 45% were later completely adapted, while 28% were only partly adapted, and 27% never adapted themselves at all. In leg injuries the corresponding percentages are remarkably similar—45%, complete adaptation; 26% partial adaptation; and 29%, no adaptation.—(Courtesy *Social Science Abstracts*).

3769. Walther, L. **Technopsychology in a Swiss industry.** *Person. J.*, 1929, 8, 1-18.—This paper describes the difficulties, aims, methods, and results of applying psychological principles and techniques in a century-old factory in Switzerland. The problems were those of a personnel classification and placement, simplification of work through time and motion studies, reduction of fatigue, and increase of output without speeding up the workers. The difficulties were (1) the apparent impossibility of introducing improvements, so skillful seemed the workers and so well organized the plant; (2) many workers were beyond the age when habits are readily modified, 40% being between 40 and 60 years old; (3) the employees were as well paid as others similarly employed: they were, therefore, without the usual incentive to coöperate in plans for reorganization. About 230 women workers in 11 departments were studied. They were largely engaged in machine tending or in such manual work as wrapping and packing. 5 dexterity tests were used: Dotting (Binet and Vaschide), Tapping, Bead-stringing (Descoeudres), Paper-cutting (Claparède and Walther), and Disk-setting (Walther). Test results were validated by comparison with foremen's ratings, the correlations ranging from .10 to 1.00; median correlation, .80. Compared with norms secured by the *Institut J. J. Rousseau*, average dexterity was 13.4% below that of the adult population of Geneva. Classification by age groups, however, made evident that this was due to the predominance of older individuals. Two functions of time-study are illustrated: to furnish the starting point for analysis and simplification of tasks; and, later, to establish standards. Tables of percentile scores permitted comparisons of departments as well as individuals. Various aids to improvement and to conservation of the workers were employed; rest periods, linked movements, automatized movements, variety in work, reorganization of flow of work, and changes in belt-conveyors and work tables to meet the requirements of comfort, convenience and ease of movement. Changes resulting in better placement and training, improved working conditions, and an increased output of from 30 to 40% without speeding up are reported.—(Courtesy *Person. J.*)

3770. Yoakum, C. S. **Business and the young accountant.** *Vocational experiences of the college graduate.* *Mich. Bus. Stud.*, 1929, 2, No. 3. Pp. 42.—Information concerning salaries, length of service, titles, etc., of a large group of accountants prepared for such work by college training.—N. L. Munn (Clark).

[See also abstracts 3488, 3514, 3580, 3605, 3771, 3857, 3862.]

## CHILDHOOD AND ADOLESCENCE

3771. [Anon.] **Census occupations covered by the child labor law.** *Labor Bull. (Ill.)*, 1928, 8, 3.—An examination of the 1920 census of occupations of Illinois children over 10 but under 16 years of age, shows that 25% of the boys and 15% of the girls were employed in occupations which are not subject to the regulations of the Illinois child labor law. These unprotected children constitute more than one-fifth of all the working children in the state. By far the largest group was engaged in agricultural labor, over two-thirds on home farms. Although this census was taken in January, 1912, children were reported as employed in agriculture, forestry and animal husbandry outside of home farms. Over 70% of the 2,587 children employed in domestic and personal service were not covered by the child labor law. Other smaller groups were employed in services classified as professional, or in trade. In communities where it is enforced the Illinois compulsory education law, which requires children between 7 and 16 years of age to attend school while it is in season, remedies the weakness of the child labor law. Results of a Children's Bureau study of the work of children on Illinois farms show that there are industrialized forms of agricultural labor carried on under conditions which may prove injurious. Illinois has failed to follow the example of Wisconsin where such work has been brought under the regulations of the Industrial Commission.—(Courtesy *Social Science Abstracts*).

3772. Easby-Grave, C. John. *Psychol. Clin.*, 1929, 17, 274-277.—A boy of bad hereditary and environmental background who nevertheless has responded so well to diagnostic teaching that he seems certain to become a normal member of society.—J. T. Metcalf (Vermont).

3773. Eiserhardt, H. **Brauchen wir ein Bewahrungsgesetz?** (Do we need a custodial law?) *Zsch. f. Kinderforsch.*, 1929, 35, 532-552.—The author discusses thoroughly the whole question which arises from the contemplated custodial law as supplementary to previous measures. She particularly deplores the fact that the Reichstag committee on criminal law in Berlin on first reading changed admissibility on interpretation by the judge to placing in the house of correction. Thus the normal development of the house of correction as a reform measure has been cut off for years. The proponents of the custodial law, however, have recently taken a new tack, on principles worked out by the Minister of the Interior. In the conclusion of her work the author takes up the concept of neglect and warns against the admixture of ethical and moral values. She defines neglect as a condition which expresses itself in physical deterioration or in a loss of inhibition of certain impulses, and which is based upon an inability to attend to one's affairs and to adjust oneself to ordered relationships.—O. Seeling (Berlin).

3774. Gerald, H. J. P. **Inverted positions in children's drawings: report of two cases.** *J. Nerv. & Ment. Dis.*, 1928, 68, 449-455.—Two cases are given which illustrate some of the steps in the process of

learning to see objects in their true spatial orientation. In both cases it seems probable that the children have advanced beyond the stage where they are aware of seeing objects upside down but are still having some difficulty in determining what the actual position is. Copies of the drawings studied are given together with a short bibliography.—R. A. Young (Boston Psychopathic Hospital).

3775. Gesell, A. Research in child development. *School & Soc.*, 1929, 29, 765-767.—A brief statement of whence we have come and whither we are going.—H. L. Koch (Texas).

3776. Gutman, A., & Easby-Grave, C. Martin. *Psychol. Clin.*, 1929, 17, 285-288.—A case of mother-fixation in a bright but badly spoiled boy of ten years.—J. T. Metcalf (Vermont).

3777. Hoenig, C. Die Stiefelternfamilie. (The family with step-parents.) *Zsch. f. Kinderforsch.*, 1929, 35, 188-331.—The author discusses the following points: (1) the family with an unmarried stepmother; (2) the family with an unmarried stepfather; (3) the unmarried stepfather in such a family; (4) the child in the family with an unmarried stepfather; (5) the family with a married stepfather; (6) the mother in the family with a married stepfather; (7) the child in the family with a married stepfather; (8) the family with a stepmother; (9) the father in the family with a stepmother; (10) the child in the family with a stepmother. The author presents the information that in every case injury has been done in the life of the child before the establishment of a new family is possible. She urges that the former state of affairs be restored and also that the damage be removed. She is forced to admit that this repair in the family with step-parents is merely a repair and never an actual removal of all traces of the former injury. In about 50% of the cases the condition of the child will be improved through the second marriage of the widowed parent. In such a situation the mother is the deciding factor in the success of the child. Unfortunately the wife often acts as persecutor of her own illegitimate children. The prejudice of the wife against the illegitimate child and also the stepchild is instinctive in nature and, therefore, cannot be influenced, at least not effectively. Outspoken, "bad" stepmothers are invariably women of evil character. It turns out best for the children in such a family with step-parents if the second marriage remains childless and also if there are only a few children present from the previous marriage. In the unfavorable cases fewer neuroses with characteristic features symptomatic of the individual defect of the environment result than do all possible forms of utter neglect and psychopathy. In drawing her conclusions the author lays stress upon the following ideas: (1) that the step-parent situation produces a typical internal conflict which necessarily results from the circumstances; (2) that the family with step-parents is not necessarily based upon an instinctively supported association. On that account the stepmother must adjust her insight so that her good will and sympathy are brought into

constant harmony with the problem as pointed out. Hanna Kühn, the author reports, has recently treated a similar subject, *Psychologische Untersuchungen über das Stiefmutterproblem*, to be found in Beiheft 45 of the *Zeitschrift für angewandte Psychologie*.—O. Seeling (Berlin).

3778. Kirkpatrick, E. A. Fundamentals of child study. New York: Macmillan, 1929. (4th ed.) Pp. 433. \$2.00.—This text presents a thorough discussion of instincts and other factors in child development. The practical applications make it especially adapted to use by parents and teachers, as it gives a detailed and comprehensive survey of the various problems relating to childhood. It presents the study of childhood rationally instead of through the traditional treatment. The material is well organized and is brought up to date.—E. Winter (Holland, Mich.).

3779. Krasuskaja, F. P. Die Spiele geistig weit zurückgebliebener Kinder. (The play of children greatly retarded mentally.) *Zsch. f. Kinderforsch.*, 1929, 35, 553-558.—The subjects for the study here published were 30 children from 8 to 16 years of age who were pupils in the home for mentally retarded children in Odessa. In all, 170 individual observations were made. The author believes that the free play of mentally retarded children reveals a series of characteristics conforming to a law. Very noticeable is the fact that the play is extremely unstable and primitive, resulting principally from the restricted development of reflex concentration. The author suggests therefore that mentally retarded children are correspondingly accustomed to collective play because it demands only common activity.—O. Seeling (Berlin).

3780. Lipshutz, S., & McNally, L. L. Parker. *Psychol. Clin.*, 1929, 17, 269-273.—An account of a post-encephalitic case, described as a victim of disordered control.—J. T. Metcalf (Vermont).

3781. Margraf, W. Psychologische Untersuchungen über die Unordentlichkeit von Schulkindern. (A psychological inquiry into disorderliness among school children.) *Arch. f. d. ges. Psychol.*, 1929, 69, 181-206.—The author has carried on an experimental study of disorderliness (carelessness) among children of three classes, 59 seven-year-olds, 67 eleven-year-olds and 36 thirteen-year-olds, and has tried to find its relationship to other factors. He makes the following findings: (1) There is a high correlation between disorderliness and number of accidents experienced. (2) As a rule children who are disorderly in one field are so in others, although some marked variations from this rule occur. (3) Cases of carelessness are fewer after holidays and week-ends. (4) There is a greater tendency to carelessness among boys than among girls, except that girls are less punctual and more forgetful. (5) Disorderly children show greater tendency to inattention and a lack of concentration. (6) Certain character traits, e.g., indifference, tardiness, unreliability, uncleanness, are probable accompaniments of the disorderly trait. (7) Disorderly children have a tendency to be poorer

in schoolroom accomplishments.—A. B. Herrig (Mount Pleasant, Mich.).

3782. Pennypacker, H. E., & Murphy, G. McD. William. *Psychol. Clin.*, 1929, 17, 278-281.—The case of a ten-year-old boy in perfect physical condition but greatly retarded mentally. His mental condition was finally explained as the consequence of an attack of epidemic encephalitis which the doctors had called diphtheria.—J. T. Metcalf (Vermont).

3783. Plant, J. S. Sociological factors challenging the practice of psychiatry in a metropolitan district. *Amer. J. Psychiat.*, 1929, 8, 705-716.—The paper is based on two premises: (1) as psychiatrists are physicians, psychiatry is—and will be for some time—interested chiefly in the individual and in only so much of his environment as, from a practical point of view, largely impinges upon his field of professional activity; (2) there are a number of basic needs in the mental health and life of the usual child. Only four of these basic needs are discussed because (a) they seem to be those which are most generally accepted by all, and (b) they represent the most pervasive and baffling of the author's problems. They are: (1) the child's need of the feeling of "belongingness"; (2) his need of a family; (3) his need to cultivate the habit of living in a world which exists rather than in one which he wishes existed; (4) his need of a compactness and cohesion in his environment such to allow the most complete interplay and integration of all the factors of his life. It is pointed out that present-day psychiatry is not adjusting to the ever-changing demands of the metropolitan area. For example, the summer camp idea is considered as a schizoid type of solution.—W. M. Rosebrook (Boston Psychopathic Hospital).

3784. Rigby, M. Gordon—a clinic picture. *Psychol. Clin.*, 1929, 17, 265-268.—In this boy an alert mind and intellectual capacity are combined with moral imbecility. He presents a real problem because of his tendency to physical violence. His great ambition is to become a pugilist.—J. T. Metcalf (Vermont).

3785. Riggs, C., & Easby-Grave, C. Lillian. *Psychol. Clin.*, 1929, 17, 282-284.—This girl was the victim of an unfavorable environment created by a weak and ignorant mother. With hospital treatment a marked improvement in her physical condition occurred, and with it a corresponding improvement in her mental condition.—J. T. Metcalf (Vermont).

3786. Schereschewsky, B. Versuche über die Entwicklung des Bildverständnisses beim Kind. (Studies of the development of the understanding of pictures in the child.) *Zsch. f. Kinderforsch.*, 1929, 35, 455-493.—The author distinguishes three kinds of picture comprehension: (1) comprehension of the sensory whole, (2) comprehension of sensory parts in relation to the whole, and (3) comprehension of sensory parts of a whole. All three kinds can be correct, possible or incorrect. The correct comprehension of sensory wholes can be divided into complete and approximate. The author had children of

various age levels describe 19 pictures very different in content. For this the children were divided into four groups of 10 each (5 boys and 5 girls). Group I included 4- to 5-year-olds, Group II, 7- to 8-year-olds, Group III, 10- to 11-year-olds, Group IV, 13- to 14-year-olds. Nearly all came from the families of workmen. The author shows that while age has a very great influence upon picture comprehension, nevertheless the different kinds of picture comprehension cannot be ascribed unequivocally to different age levels, because the kind of picture is an important factor. The greater or less degree of detail in the statement has no relation to picture comprehension.—O. Seeling (Berlin).

3787. Stern, E. Jugendpsychologie und Jugendkriminalität. II. (The psychology of youth and criminality in youth. II.) *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1928, 1, 412-425.—The author points out that there is no certain borderline between normal and abnormal, and puberty is a time of special stress, when traits appear which predispose the individual toward unsocial forms of behavior. Certain types of such behavior are obviously sexual, such as perversions. Other types are primarily but not so obviously sexual, such as cruelty and pyromania. Repression and frustration play a large part in the development of neurotic conditions during this period. The feeling of inferiority, which may have its roots either in an idea of organic inferiority or in the child's helplessness in his social environment, may lead to compensation through theft of money or articles with which to make a display. The disturbed and crowded home conditions which often prevail in a city reinforce the unfavorable influences in the outer environment to which the adolescent must adjust. In addition to the objective situation, the universal questioning of spiritual values adds a special difficulty just at present. In conclusion, it is suggested that, though adolescence involves conditions particularly conducive to unsocial attitudes, undesirable consequences can be guarded against by education.—M. N. Crook (Clark).

3788. Tubbs, E. V. A study of five problem cases. *Psychol. Clin.*, 1929, 17, 249-264.—The author made a study of five cases selected from the files of the Institute for Juvenile Research in Chicago. On the basis of this study he makes a plea for more individual attention to children in the public schools.—J. T. Metcalf (Vermont).

3789. Viteles, M. S. The influence of age of pubescence upon the physical and mental status of normal school students. *J. Educ. Psychol.*, 1929, 20, 360-368.—There is no significant relationship between age of pubescence and height, weight, intelligence and academic achievement in the case of 236 post-pubescent girls in the first year of the normal school. Earlier studies have found that pubescence is accompanied by a spurt in physical growth and mental development. The present findings "suggest that those who mature late profit from this spurt equally as much as those who mature early, the effect of the spurt in the two groups being equalized as adult life is approached." The findings indicate the

importance of determining physiological age in the individual diagnosis of pubescents.—*J. A. McGeoch* (Arkansas).

3790. **Vorwahl, H.** *Psychologie der Vorpubertät.* (Psychology of prepuberty.) Berlin: Dümmler, 1929. Pp. 160. M. 6.50.—An introduction to the individual life of children from 10 to 14 years of age which describes the conspirator and movie fantasies, the love of secrecy, the double life, the impulse to show off, the mental horizon, the habitual lability, sexual curiosity and playfulness, in which connection inevitable departures from the norms of adults are punished as misdemeanors. The relation of the child to parents and siblings, the motive for making friends, favored games and youthful tricks are treated. Children's gangs, class and social life and the expression of social tendencies are discussed, along with the rôle of the child's self-consciousness and the grasping of religion and values. Relations of the subject to religion, technology, occupation and the progress from magic to reality are clarified. The child's egotism is displayed in all its details, the the economic-materialistic values, source of strength, wanderlust, lack of feeling, and cruelty, i.e., an abundance of primitive motives and laws, as Schjelderup-Ebbe has depicted them among chickens. With reference to the material of current books, autobiographic notes, and mass movements in schools of all kinds, there is presented a systematic exposition of the mental life of the prepubescent. The book also gives a detailed statement concerning psychoanalysis, individual psychology and Ch. Bühler's thesis of a negative phase. It examines the question of a separate development in the two sexes in this field of mental development, which has been compared for purposes of explanation to middle life.—*H. Vorwahl* (Harburg).

3791. **Witmer, L., & Ambler, M. E.** *Orthogenic cases—XVII—Jack: feeble-minded or normal.* *Psychol. Clin.*, 1929, 17, 217-225.—An account of the treatment of the case of a boy who had been diagnosed by a psychiatrist as a low-grade imbecile. At the clinic his symptom-complex was regarded rather as hysterical, and he was given special teaching for eight and one-half months. At the end of this period his physical and mental condition had so far improved that he was able to do the work of the second grade in a public school.—*J. T. Metcalf* (Vermont). [See also abstracts 3473, 3485, 3493, 3497, 3512, 3618, 3690, 3692, 3704, 3710, 3750, 3772, 3813, 3828, 3836, 3838, 3849, 3863.]

## EDUCATIONAL PSYCHOLOGY

3792. **Abell, E. L.** *Grading from the median.* *J. Educ. Res.*, 1928, 18, 425-428.—The author presents a method of grading performance which utilizes deviations on both sides of the median. This is considered to be a more scientific method of grading than that in general use and to offer the following additional advantages: "(1) Each student's work is measured by comparison with the performance of the middle or average group. (2) Subjective and objec-

tive measures are in the same units and may therefore be easily combined. (3) Different factors that go to make up the final grade may be weighted according to their importance. (4) The students in the class are definitely ranked according to the term's achievement."—*N. L. Munn* (Clark).

3793. **Alexander, T.** *The training of elementary teachers in Germany.* New York: International Institute of Teachers College, Columbia Univ., 1929, No. 5. Pp. 340. \$3.50.—The author describes the rather fundamental reorganization of provisions for training elementary teachers which has been made since 1918, particularly in Prussia, Hamburg, Saxony, Hesse, and Thuringia. The account deals not only with the legislative bases of the recent changes and with the institutional machinery that has been built up, but also with the changes in aims, methods, and social setting of elementary education in Germany. A bibliography of 162 titles is given.—*R. Leeper* (Clark).

3794. [Anon.] *Creating a curriculum for adolescent youth.* *Res. Bull. Nat. Educ. Asso.*, 1928, 6, No. 1. Pp. 80. \$.25.—*W. S. Hunter* (Clark).

3795. [Anon.] *Sad story.* *Nation*, 1929, 129, 81.—Apropos of the returns on a questionnaire sent out by Manly H. Harper of Teachers College, Columbia, to 3,000 educators, this editorial makes and elaborates upon the following comment: American educators are "in the main inconsistent, muddle-headed, willing to ignore facts, ignorant of the progress of history and science, and completely subservient to constitutional authority."—*M. Goodrie* (Clark).

3796. **Åstrand, S.** *Om pedagogiken som vetenskap.* (On pedagogy as a science.) *Ark. f. Psykol. o. Ped.*, 1929, 8, 38-50.—A theoretical treatise. "Pedagogy is the science of how the older generation influences the younger." Two stages of scientific pedagogical work are possible, description and pedagogical analysis, both of these having their own characteristics depending upon the special nature of the pedagogical material.—*M. L. Reymert* (Wittenberg).

3797. **Ballesteros y Usano, A.** *Libertad y disciplina en la escuela unitaria.* (Liberty and discipline in a unitary school.) *Rev. de ped.*, 1929, 7, 259-266.—The author discusses the problem of harmonizing the two principles of liberty and discipline in the classroom.—*J. W. Nagge* (Harvard).

3798. **Balzer, J. F.** *The college and character education.* (X). Summary report of section chairman. *Rel. Educ.*, 1929, 24, 464-465.—*J. P. Hylan* (Stoneham, Mass.).

3799. **Berinsohn, H. W.** *Welke gevaren bedreigen de jeugd op fysiek gebied bij de keuze van een beroep?* (What dangers threaten the youth physically in the choice of a vocation?) *Jeugd en Beroep*, 1928, 1, 146-152.—A two-fold classification is suggested: (1) Circumstances which are inseparably connected with the vocation; (2) factors which are, as it were, artificially imposed from the outside. Various dangers are tabulated and references are

submitted to various English, French and Dutch authorities. Methods of prevention are summarized, and medical control and protection is recommended.—*H. Hospers* (Western Theological Seminary).

3800. Bickham, M. H. The college and character education. (I). Culture clashes in college communities. *Rel. Educ.*, 1929, 24, 451-454.—Colleges have increasingly come to be the meeting places of different cultures coming from city and country and American and foreign sources. When these are represented by forceful personalities, moral derangement and disciplinary problems are likely to arise.—*J. P. Hylan* (Stoneham, Mass.).

3801. Bower, W. C. Reflections on the Des Moines convention. (I). *Rel. Educ.*, 1929, 24, 387-389.—The Des Moines convention marked a number of notable advances in the development of the Religious Education Association. First, the convention undertook to explore a single aspect of character education, that which involves the community as a factor; (2) the program was arranged on a 50-50 basis of set addresses and informal discussion; (3) the convention was introduced to the techniques of the psychiatrist and sociologist; (4) emphasis was placed on the religious values of modern life; (5) there was engendered a feeling of fellowship between those of widely differing points of view.—*J. P. Hylan* (Stoneham, Mass.).

3802. Brown, W. A. Summarizing the convention. *Rel. Educ.*, 1929, 24, 483-484.—Tangible results from this convention are not much in evidence, but we may draw the conclusion that the representatives of organized religion of whatever brand should coöperate with the representatives of the permanent institutions such as the family, the school, commerce, industry, press, etc., in the building up of sound ideals of character.—*J. P. Hylan* (Stoneham, Mass.).

3803. Buckingham, B. R. The philosophy and organization of research. *School & Soc.*, 1929, 29, 755-764.—*H. L. Koch* (Texas).

3804. Chou, S. K. Reading and legibility of Chinese characters. *J. Exper. Psychol.*, 1929, 12, 156-177.—A study of the reading direction and character position as these factors influence the speed of reading Chinese. Characters were printed on cards and exposed by a special type of quadrant tachistoscope. The subjects were required to read these cards in four directions. By altering the position of the characters and the direction of reading, the speed of reading Chinese was found to be impaired in the extreme case by about 19.6%. The change from normal downward reading of upright characters to upward reading showed a 16.7% decrement. Position of the characters is a more important factor in determining the speed than the direction of reading, and it was found better in all positions to read from right to left than from left to right, and better to tilt the characters to the right for "up and left" reading, and to the left for "down and right" reading, although tilting characters to the right is better for all directions of reading as a whole. Reading direction is the least important factor in speed of

reading Chinese, while character position is the most important factor. A bibliography of 34 titles accompanies the article.—*S. Renshaw* (Ohio State).

3805. Clark, M. G. The public school and character education. (II). Summary report of section chairman. *Rel. Educ.*, 1929, 24, 469-470.—*J. P. Hylan* (Stoneham, Mass.).

3806. Domm, E. E. The college and character education. (IX). My method of teaching Bible. *Rel. Educ.*, 1929, 24, 462-464.—*J. P. Hylan* (Stoneham, Mass.).

3807. Exner, M. J. Does the community determine character? (III). Sex and character. *Rel. Educ.*, 1929, 24, 418-420.—A recent significant movement in religious education is the utilization of sex impulses for purposes of character education. The sex-reproductive group of impulses are most powerful and influence both the physical and highly spiritual aspects of life. The curiosity of the child is especially keen about sex matters and care should be taken that the information that it gets is wholesome and leads to a respect for these agencies of life.—*J. P. Hylan* (Stoneham, Mass.).

3808. Faris, E. Does the community determine character? (I). Introduction. *Rel. Educ.*, 1929, 24, 408-409.—*J. P. Hylan* (Stoneham, Mass.).

3809. Flitner, W. Zur Frage der Heilpädagogik in der neuen Lehrerbildung. (The place of curative pedagogy in the new teacher training.) *Zsch. f. Kinderforsch.*, 1929, 35, 406-411.—The author begins on the basis that today's separate courses of instruction for curative pedagogy are disappearing. The only place they remain seems to be the pedagogical academy, the place of the new teacher training in Prussia as in other lands. He adds that the development of curative pedagogy by means of a course comprising only four semesters is not possible. On that account he advises some curative pedagogical courses for teachers in addition to those of the existing academy, including the passing of a second examination. This should of course be done only at those places where a system of relief schools and curative pedagogical institutions are being brought into a working association with the academy.—*O. Seeling* (Berlin).

3810. Ford, C. A. Methods and results of teaching a case of congenital word-blindness. *Psychol. Clin.*, 1929, 17, 226-233.—In developing a method of teaching this case it was found necessary to use phonics and to give extensive drill, bringing several different kinds of imagery into play. The application of standard tests showed considerable improvement in reading ability. There was definite improvement in social attitude as well.—*J. T. Metcalf* (Vermont).

3811. Freeman, F. S. Elusive factors tending to reduce correlations between intelligence test ranks and college grades. *School & Soc.*, 1929, 29, 784-786.—As a result of conferences with college students summoned to account for marked discrepancies between their intelligence test performance and scholastic achievement, the author has come to believe that

the elusive factors which lower the correlations between test ranks and grades are: motivation, extra-curricular activities, work for self-support, health, poor study habits, and absorption in other than scholastic interests.—*H. L. Koch* (Texas).

3812. **Good, C. V.** *Teaching in college and university.* Baltimore: Warwick & York, 1929. Pp. xi + 557. \$3.00.—The book is a survey of the problems and literature in higher education. "The writer has attempted through a painstaking bibliographical survey of the field of higher education to locate most of the important work that has been done during the last decade, to discover major problems, and to digest, organize, and interpret in an impartial way the available literature." Chapters are devoted to: sources of information; present status of colleges, teachers, and students; objectives and standards; subject matter; bases of learning; teaching methods; measurement and guidance; and reorganization, adjustment, attempts at improvement, and research. Bibliographies of special method, the curriculum, and other problems in 12 subject-matter fields are included in the appendix. Not including extensive foot-note references, about 160 pages are devoted to bibliography. Author and topic indices are included.—*L. W. Gellermann* (Clark).

3813. **Goodsell, W.** *The family and character education. (II). Character building in the family.* *Rel. Educ.*, 1929, 24, 440-442.—*J. P. Hylan* (Stoneham, Mass.).

3814. **Gruenberg, B. C.** *Parents and sex education; for parents of young children.* New York: Amer. Soc. Hygiene Asso., 1928. Pp. 94. Apply.—*W. S. Hunter* (Clark).

3815. **Hamilton, D.** *An experiment with an individual technique in sixth grade arithmetic.* *J. Educ. Res.*, 1928, 18, 339-344.—The author presents an individual method of teaching sixth-grade algebra which he applied experimentally to 16 sixth-grade pupils for a period of seven and one-half months. The progress under individual instruction of the type used was almost twice that made under the class method, although the time was but a little more than half as long.—*N. L. Munn* (Clark).

3816. **Hamlin, H. M.** *Measurement of the effect of social instruction through changes in community practice.* *J. Educ. Res.*, 1928, 18, 315-317.—A group of teachers of vocational agriculture in central Iowa attempted to determine the effect of their teachings regarding the cultivation of legumes upon the actual practices of the communities. A comparison was made between the farms of those who had received instruction and the farms of those who had not. Although the conditions of the research could not be strictly controlled, the results seem to show that the instruction was decidedly effective and that the measurement of the effectiveness of instruction in such subjects is practicable.—*N. L. Munn* (Clark).

3817. **Hammer, B.** *Individuell eller kollektiv arbetsform i skolan? (Individual or collective work in the school?)* *Ark. f. Psychol. o. Ped.*, 1929, 8, 1-12.—Brief historical and critical exposition of theoret-

ical discussions and practical pedagogical endeavors in Sweden pertaining to the general problem of individual instruction vs. classroom work in school. There are also references to trends in American pedagogy. No bibliography.—*M. L. Reymert* (Wittenberg).

3818. **Heaton, K. L.** *Character building through recreation; a training course in recreational leadership.* Chicago: Univ. Chicago Press, 1929. Pp. 243. \$1.75.—*R. R. Willoughby* (Clark).

3819. **Heijermans, I.** *Het meisje en haar beroepsvorming. IV. (The young girl and her vocational guidance.)* *Jeugd en Beroep*, 1928, 1, 139-142.—A severe arraignment of a proposal by the Direction of the Association for the Advancement of Industrial Education for Girls, as follows: Girls may attend an industrial school instead of the 7th school year in the lower grades. The school must be instituted in such manner that not less than 16 hours of instruction weekly is given outside of the evening hours. It is unfortunate that we allow the school career of the young girl to be influenced by the demands of employers, who, of course, have no interest in the fulfillment of normal childish aims.—*H. Hospers* (Western Theological Seminary).

3820. **Henmon, V. A. C.** *Educational psychology.* *Psychol. Bull.*, 1929, 26, 445-456.—A bibliography of 217 titles grouped under the headings: general texts, general psychology of learning, psychology of school subjects, the pre-school child and exceptional children.—*J. F. Dashiell* (North Carolina).

3821. **Heyhoe, A. G.** *The college and character education. (III). Character building factors at Doane College.* *Rel. Educ.*, 1929, 24, 455-457.—*J. P. Hylan* (Stoneham, Mass.).

3822. **Hughes, A. F.** *The college and character education. (VI). Chapel at Hamlin University.* *Rel. Educ.*, 1929, 24, 459-460.—*J. P. Hylan* (Stoneham, Mass.).

3823. **Hunsicker, L.** *Concerning overlapping of professional courses in teacher-training institutions.* *School & Soc.*, 1929, 29, 776-778.—The author attempted to justify her course in educational measurements by the technique of comparing the grades made on an exhaustive examination by those students who were entering and those who had completed her course. She found practically no overlapping in the two groups, and hence feels she is not duplicating the material presented by other instructors.—*H. L. Koch* (Texas).

3824. **Johnson, M.** *Youth in a world of men.* New York: Day, 1929. Pp. x + 305. \$2.50.—In this book the author outlines the educational principles underlying the work at her experimental school at Fairhope, Alabama. The aim of education should be growth toward fine physical development, keen mental activity, and unselfconscious emotional life. If school conditions are right no normal child can fail. The child should have opportunity to use his native endowment to the highest advantage and to engage in wholesome activity suited to his stage of development. Precocious children should not be ac-

celerated or subjected to specialization; they should be given more work but kept with others of their own age. Chapters are devoted to the following topics: nature and needs of the child, fundamental impulses, creative work, creative play, thinking power, discipline, morals, religion, sex, and social development. Many of these follow the plan of discussing first correct, then incorrect methods of achieving the desired ends. In the final chapter a school program for elementary school, high school, and college is discussed and outlined. Throughout the book the advantages of a school which encourages creative work are emphasized, as opposed to the grading, marking, promoting program of today.—*L. W. Gellerman* (Clark).

3825. Jones, E. S. *The preliminary course on "how to study" for freshmen entering college.* *School & Soc.*, 1929, 29, 702-705.—The University of Buffalo requires an intensive three weeks' course in "how to study" of entering freshmen who rated among the lowest two-fifths of the graduates of the larger and the lowest three-fifths of the graduates of the smaller high schools of the state. The course is given before the opening of school and includes training in note-taking, rapid reading, selection of material, English composition, mathematics, the use of the library, memorizing, etc. Those students receiving the training average as high in their college work as the middle fifth of the students coming from the larger high schools and the upper two-fifths of those coming from the smaller high schools of the state. The benefit accruing from the special course seems most evident in such drill subjects as foreign languages, English, and mathematics.—*H. L. Koch* (Texas).

3826. Jones, V. *Educational tests.* *Psychol. Bull.*, 1929, 26, 397-417.—121 titles reviewed under the headings: general presentations, extension of measurement methods, intensive studies of methods in use, use of tests in surveys, in marking systems, in pupil classification, in diagnosis, and in prognosis.—*J. F. Dashiell* (North Carolina).

3827. Jordan, D. S. *The trend of the American university.* Stanford Univ., Calif.: Univ. Press, 1929. Pp. 135. \$7.50.—*W. S. Hunter* (Clark).

3828. Keller, H. *Das nervöse Kind in der Schule.* (The nervous child in school.) *Zsch. f. Kinderforsch.*, 1929, 35, 412-419.—The author since 1924 has undertaken investigations of 815 children in order to clarify the problem of school nervousness. He found out to begin with that only children are much more sensitive to a nervous atmosphere than children from large families. The corresponding numbers are 61% as opposed to 39%. The proportion of nervous school children in general was very great, amounting to 48%. In many cases children new in school showed poor concentration, especially if they were occupied at home during early childhood with preparation for school. Keller views the admitted facts of growing nervousness in school children as a backwardness of adjustment with respect to the completely changed life relationships. There is no method given by which to raise the power of resistance of the nervous system directly. The environmental

factor must be combated, particularly through decreasing the number of unfavorable stimuli.—*O. Seeling* (Berlin).

3829. Klapper, P. *Contemporary education.* New York: Appleton, 1929. Pp. xxv + 660. \$2.40.—Designed as a text in introductory or orientation courses in education as well as courses in principles of education, this book attempts "to coördinate the accepted principles of social and psychological studies and to indicate their significance for education today." The volume is comprised of five main parts. Part I presents the author's views as to the aims and ideals of education. "That education . . . is best which gives the individual the freest development consistent with social welfare." Possible means of realizing this liberal ideal are discussed. Part II deals with education as physical adjustment. Both corrective and preventive programs of health education are outlined. Play and athletics are treated in one chapter; another is devoted to hygiene and sex education. The third part, on "education as a social adjustment," is divided into a discussion of socialization of the child through the curriculum and one on socialization through group activities. In the latter connection religious education of the child is discussed. Part IV treats of education as economic adjustment; it largely deals with vocational education and guidance. The last part requires approximately half the space and is devoted to education as a process of mental adjustment. The first section of Part V discusses the utilization of inherited behavior. Inheritance is dealt with biologically and psychologically. A chapter is devoted to education through imitation, another to the education of the emotions, while a third considers the subjects of intelligence and tests. The second section of Part V is concerned with the acquisition of new forms of behavior. The laws of learning, habit and memory are set forth in two chapters; three are devoted to the "recitation patterns." An entire chapter is given over to the problem of transfer of training. The final chapter deals with deliberative behavior. Ample bibliographies are included. Questions for discussion follow each chapter.—*F. A. Geldard* (Virginia).

3830. Liedloff, W. *Beiträge zur Psychologie der mathematischen Schulbegabung.* (Contributions to the psychology of mathematical ability in school work.) *Jenaer Beitr. z. Jugend- u. Erziehungspsychol.*, No. 6.—After introductory remarks about mathematical ability in general and mathematical ability in school work and an enumeration of the relevant publications to date, the author reports his own investigations, conducted with pupils of a secondary school in a small town. The author has approached the problem of mathematical ability in school work from two sides. As a teacher he ranked his pupils according to their ability in mathematics, geometry, arithmetic, according to their attention, willingness and independence in mathematical instruction, and according to their achievements and care in geometry and arithmetic; and he compared these rankings with each other with and without the use of correlation. He then tested his pupils with known

and new tests, distinguishing two experimental groups, with and without concrete material. The pupils were then again ranked according to the test results and these rankings were correlated with those mentioned above. From these results he tried to determine the partial dispositions which are connected in some way with mathematical ability in school work. There were found to be closer connections between the abilities for mathematics, geometry and arithmetic, than between mathematical ability and independence in mathematical instruction. The study concludes with a description of the individualities of the three good, the three poor, and the remaining average mathematicians.—*W. Liedloff* (Eisenberg).

3831. *Logie, L. Self-expression in a junior school.* New York: Oxford Univ. Press, 1929. Pp. 86. \$3.50.—*W. S. Hunter* (Clark).

3832. *López, J. El problema esencial de la obra educadora.* (The essential problem in educational work.) *Rev. de ped.*, 1929, 7, 252-258.—The four fundamental factors in education are the teacher, the school, the child, and the method employed. The author attempts to find the weakest factor in the Spanish educational system. He concludes that the principal reason for the failure of the desired development in practical pedagogy in Spain, as in other continental countries, lies in the failure of the teacher to perform his proper function. Spencer has written: "The success of a method depends upon the intelligence with which it is applied." Various characteristics which a successful teacher should have are set forth. Among these are stressed love of teaching, proper normal school training, and a broad sympathy. The author also advocates a program of vocational guidance whereby teachers will be selected.—*J. W. Nagge* (Harvard).

3833. *Mary, Sister (of the Visitation). Visual perception in reading and spelling; a statistical analysis.* *Cath. Univ. Amer., Educ. Res. Bull.*, 1929, 4, No. 1. Pp. 48.—Two series of nine tests of visual perception composed of words, groups of unrelated letters, digits and drawings, were used to study the relation of perception, spelling and reading. The two series were alike in form but different in content. The 110 subjects were from the fourth and fifth grades. Mental ages were estimated on two forms of the Dearborn Comparison Tests of Intelligence. Scores for eight reading tests, two forms each, two spelling tests, two forms each, and four cancellation tests were used. The author concludes that "the function of perception does not operate uniformly on all kinds of material in every situation." The type of material used in perception tests is of greatest importance. Discrimination of minute details in the series of words and groups of words were most important in reading. The above are also important in spelling. The non-verbal materials, digits and drawings have no appreciable relationship with reading or spelling. Partial correlations show that the perceptual factors are of greatest significance in both reading and spelling.—*R. A. Brotemarkle* (Pennsylvania).

3834. *May, M. A., Hartshorne, H., & Welty, R. E. Personality and character tests.* *Psychol. Bull.*, 1929, 26, 418-444.—199 titles reviewed under the headings: summaries, objective tests of certain personality and behavior traits (such as ascendance-submission, deception, etc.), tests of affective aspects (instincts and emotions, mood and temperament, attitudes and interests), tests of social-ethical ideas, rating scales, quantitative experimental studies (bodily structure and personality, traits and abilities, moral concepts, miscellaneous), observation and record keeping, discussions.—*J. F. Dashiell* (North Carolina).

3835. *Menninger, K. A. Psychoanalytic observations on the mental hygiene problems of college students.* *J. Nerv. & Ment. Dis.*, 1929, 69, 642-650.—Considers the psychoanalytic viewpoint on "necking," immorality, flunking, deviltry, drinking, stealing, and suicide. Nearly all the behavior disorders can be interpreted as reactions of one sort or another to the father and surrogates.—*R. A. Young* (Boston Psychopathic Hospital).

3836. *Morgan, J. J. B. Does the community determine character? (IV). Character education and the clinic.* *Rel. Educ.*, 1929, 24, 420-422.—The clinical approach to the study of character development appears to have great promise. A child is brought to a psychological clinic because of some irregularity of conduct, and what is done for him depends upon an analysis of this conduct. The education in behavior that the child has received is traced and by piecing together the information from various sources a cross-section of his personality is obtained. When the cause of the personality difficulty is found, a remedy is sought. It is essential to use the person or organization that fits the situation rather than to fit the child into a ready-made program.—*J. P. Hylan* (Stoneham, Mass.).

3837. *Muse, M. B. An introduction to efficient study habits according to the laws and principles governing economical learning.* Philadelphia: Saunders, 1929. Pp. 110. \$1.00.—This book is intended to review for the college student the chief laws and principles governing economical learning. The primary laws, exercise, readiness (mind-set), effect, reflex conditioning, trial-error; and the sub-laws, primacy, intensity, recency, etc., are discussed. Study techniques and rules for economical study are presented.—*P. H. Ewert* (Vermont).

3838. *Newsy, A. A. Der Kindergarten und die Schwererziehbarkeit.* (The kindergarten and the difficulty of being trained.) *Zsch. f. Kinderforsch.*, 1928, 34, 533-552.—The author investigates the problem of differentiating the mass of children in kindergartens from the Russian point of view. The kindergartens of the U. S. S. R. chiefly contain children of poor laborers' families and of unmarried mothers. The 30 kindergartens of Moscow contain 10-15% of children that are hard to train. According to Newsy, the problem of difficult children during the pre-school age is essentially the problem of the relation of the child to its environment. The

author divides difficult children into three groups: (1) exogenic reaction group, (2) somatogenic group, (3) endogenic group. With the first he includes defense reactions, defects of individual behavior and defects of social behavior. With the second he includes infantilism, fatiguability, lymphatic disorders, lues congenitalis, etc. With the third he includes nervousness, psychopathic personalities, oligophrenias, etc. 100 investigated cases contained 23% of (1), 48% of (2), and 29% of (3). Finally the author demands the establishment of institutions for retarded children of pre-school age, as has long ago been done for public schools to lighten their burden.—*O. Seeling* (Berlin).

3839. Odell, C. W. *A critical study of measures of achievement relative to capacity*. Urbana, Ill.: Univ. Illinois, 1929. (*Educ. Res. Bull.*, No. 45.) Pp. 58. \$0.50.—The general purpose of the bulletin is to present a critical study of measures of achievement relative to capacity. The terms employed are classified and defined, and an historical account of the origin of various proposed measures is given. Following that, three questions are discussed: (1) What are the merits and demerits of the various proposed measures? (2) How valid are such measures? (3) How reliable are such measures? In connection with these questions the writer refers to practically all published critical discussions pertaining to the topic and presents some hitherto unpublished, original data. The proposed measures considered are: educational quotient, subject quotient, achievement quotient or accomplishment quotient, accomplishment ratio, Pintner's difference method, Torgerson's efficiency quotient, Peters' high school and college accomplishment quotient and Otis' similar measure, Symonds' index of effort, Nygaard's modified accomplishment quotient, and Rand's suggested program of reconstructing such methods. The writer recommends: (1) that "quotient" be used rather than "ratio"; (2) that "achievement quotient" or "accomplishment quotient" be applied to achievement or accomplishment age divided by mental age; (3) that "subject quotient" and "educational quotient" be used when the divisor is chronological age; (4) that Symonds' "index of effort" be used where satisfactory quotient measures are not available; and (5) that the other suggested measures be dropped. Franzen's belief that an A. Q. of 100 is the theoretical maximum is incorrect; an A. Q. of this size is average. The validity of these measures is not very high and their reliability is decidedly unsatisfactory.—*L. W. Gellermann* (Clark).

3840. Odell, C. W. *The use of scales for rating pupils' answers to thought questions*. Urbana, Ill.: Univ. Illinois, 1929. (*Educ. Res. Bull.*, No. 46.) Pp. 34. \$0.50.—The general problem is a comparison of the reliability of marks given with and without the use of scales (sets of samples or specimens arranged in order of merit. Nine types of thought questions were used in civics, general science, American history, and English literature. A detailed account of the construction of the scales and the procedure of the investigation is given. "On the whole, the reliability

of ratings given with the scales was not found to be significantly higher than that of those given without the scales." Some data are included in an appendix on the reliability of marking traditional examination papers. In general these support the results of Monroe and Souders, and Bolton; the unreliability of traditional marks was found to be not nearly so great as had been indicated by Starch and Elliott and others.—*L. W. Gellermann* (Clark).

3841. Odell, C. W. *Who have contributed most to the educational measurement movement?* *School & Soc.*, 1929, 29, 751-754.—In order to discover what men have been making the most important contributions to the educational measurement movement, the author studied the references in 20 recent texts concerning tests and measurements. The bases of comparison used in the study were: (1) the number of sources referring to a given author; and (2) the total number of individual references to a given author in all of the texts. The two methods did not yield the same results; but, according to both, Thorndike, Terman, Ruch, McCall, Monroe, Pressey, and Otis ranked conspicuously high.—*H. L. Koch* (Texas).

3842. Okerlund, G. M. *Junior college graduates in the universities*. *School & Soc.*, 1929, 29, 676-677.—Those students who entered the junior class at Stanford University after spending the first two college years in a junior college are compared with juniors who had taken their freshman and sophomore work at Stanford. Although the former were an intellectually more highly selected group, they did not equal the Stanford group in scholastic accomplishment until the second quarter of their junior year and did not reach their full stride until the last quarter of their senior year. The conclusion is drawn that the junior colleges do not prepare their charges so well for advanced work as does Stanford University.—*H. L. Koch* (Texas).

3843. Pintner, R. *Educational psychology*. New York: Holt, 1929. Pp. x + 378. \$2.50.—The author presents an elementary textbook written essentially from Thorndike's point of view. Educational psychology is defined as "a study of the behavior of the individual in response to educational situations." The subject has two main divisions: the study and measurement of original human nature, and the study and measurement of the modifications of this nature. The book is subdivided on this basis, 170 pages being given to the first division and 175 to the second. References and exercises are included.—*W. S. Hunter* (Clark).

3844. Polak, A. *Grensgevallen*. (Border cases.) *Jeugd en Beroep*, 1928, 1, 161-164.—Border cases are defined as cases where the help of a bureau of vocational choice is invoked, not for the choice of a special vocation, but for ways and means to secure full or partial help for their support in life. A number of cases are cited and the practical outcome of advice noted.—*H. Hospers* (Western Theological Seminary).

3845. Prosser, C., & Allen, C. R. *Have we kept the faith? America at the crossroads in education.*

New York: Century, 1929. Pp. xvi + 429. \$2.75.—An attempt to show how far the schools of this country have drifted from the ideas of the founders as to the kind of public education which would preserve and promote this democracy. In any democracy stability and progress depend upon the intelligence, not of a few, but of all the people. While our elementary schools have become democratic in spirit, our high schools and colleges are operating an autocratic scheme of aristocratic education. The task is not to attack any schoolmen personally, but to analyze the soundness of the traditional theories they hold, the social justice and wisdom of the traditional policies they follow, and the real social value of the work they are doing. Funds raised by public taxation are expended largely on those who go to college and who on the whole would be best able to pay for such services, while little is expended for those who go to work, and who are least able to provide it for themselves. An attempt is made to trace the history of American public education. Modern aims and practices are compared with ideas expressed by the fathers.—*R. C. Travis* (Yale).

3846. **Ross, J. E.** The future of character education. *Rel. Educ.*, 1929, 24, 479-480.—*J. P. Hylan* (Stoneham, Mass.).

3847. **Samuelson, A.** The public school and character education. (I). Character development and the curriculum. *Rel. Educ.*, 1929, 24, 466-469.—*J. P. Hylan* (Stoneham, Mass.).

3848. **Slaughter, S. W.** Reflections on the Des Moines convention. (II). *Rel. Educ.*, 1929, 24, 389-390.—Scientific method controlled the entire proceeding, and no one attempted to define religion or character in a dogmatic way. The past was revered but not worshipped as ultimate. The first aim was to ascertain the highest values in terms of present human needs.—*J. P. Hylan* (Stoneham, Mass.).

3849. **Statten, T.** Appraising the results of a summer camp. *Rel. Educ.*, 1929, 24, 565-571.—The summer camp affords opportunities to develop desirable social attitudes and improve social adjustments. The most conspicuous improvement was found to be in the attitudes of the children towards laws, regulations, and government. There was a decided increase in the desire for adventure and risk. The most noticeable improvement in boys as seen by parents was in self-confidence, courtesy, and responsiveness to parental suggestion.—*J. P. Hylan* (Stoneham, Mass.).

3850. **Steere, H. J.** The effect of character traits on scholastic achievement. *School & Soc.*, 1929, 29, 707-708.—Five hundred 8-, 9-, and 10-year-old pupils in the elementary schools were rated by their teachers on initiative, persistence, control of attention, trustworthiness, accuracy, and scholarship. The correlation between the scholarship and character ratings was .73; between the former and IQ, .48. Among groups of individuals having the same IQ, those students rated above the median in character showed a scholastic average .7 to 8.7 points higher than those rated below the median. There were also 14 to 44%

more subject failures in the low character groups than in the high. The author pleads for character education in the schools.—*H. L. Koch* (Texas).

3851. **Stoke, S. M., & Cline, W. F.** The avocations of one hundred college freshmen. *J. Appl. Psychol.*, 1929, 13, 257-265.—Forty-five forms of recreation of 100 college freshmen (20 from each quintile of intelligence test scores) reported for a period of a month, show that: (1) the brighter students show a greater preference for reading, plays and dances; (2) as a whole the boys studied tend to prefer sedentary avocations which are apt to be amusing rather than recreative; (3) 64% of the unsuccessful students exceed the median of participation set by the successful students; (4) the more intelligent boys play about 25% more and have a greater variety of activities than the less intelligent; (5) excessive indulgence is an almost certain bar to high scholarship, and in combination with low intelligence is just as certain to lead to exclusion.—*G. L. Barclay* (Nebraska).

3852. **Stranahan, E. H.** The college and character education. (IV). Bible teaching at Penn College. *Rel. Educ.*, 1929, 24, 457-458.—*J. P. Hylan* (Stoneham, Mass.).

3853. **Stump, N. F.** Oral versus printed method in the presentation of the true-false examination. *J. Educ. Res.*, 1928, 18, 423-424.—The average *r* between results obtained with oral true-false examinations and printed true-false examinations covering the same questions was found to be .47. The author says that "since the coefficient is 'marked' we may conclude that the extra time needed to prepare mimeographed copies of True-False . . . is probably not justifiably spent." When IQ's were correlated with both types of true-false examination the coefficients were sufficiently high "to show that we may predict that a student with a high IQ will make a high score on an oral true-false test and that the pupil with the low score will make a relatively low score on the same examination." In telling the story of achievement the oral test was slightly superior.—*N. L. Munn* (Clark).

3854. **Teener, J. W.** The college and character education. (VII). Guidance of exceptional students at Park College. *Rel. Educ.*, 1929, 24, 460-461.—*J. P. Hylan* (Stoneham, Mass.).

3855. **Thompson, L. J.** Mental hygiene in a university. *Amer. J. Psychiat.*, 1929, 8, 1,045-1,052.—A brief account of the organization and types of work carried on in this field among the students at Yale University.—*W. M. Rosebrook* (Boston Psychopathic Hospital).

3856. **Thorp, R. L.** The college and character education. (V). Student attitudes toward the church. *Rel. Educ.*, 1929, 24, 458-459.—*J. P. Hylan* (Stoneham, Mass.).

3857. **Tinker, M. A., & Paterson, D. G.** Studies of typographical factors influencing speed of reading. III. Length of line. *J. Appl. Psychol.*, 1929, 13, 205-219.—Previous opinion on the relation of line length to speed of reading favors short lines. Using

10 point type, speed of reading tests were made on 560 college students, with texts set in eight different lengths of line varying from 59 to 186 mm. Comparing an 80 mm. length with each of the seven others, it was found that for 10 point type the 80 mm. line yields the fastest reading, not only for those of average speed, but for fast and slow readers as well. Fast readers, however, are retarded relatively more by non-optimal line-lengths than are average or slow readers.—*G. L. Barclay* (Nebraska).

3858. Todd, A. J. The family and character education. (I). Introduction. *Rel. Educ.*, 1929, 24, 437-440.—*J. P. Hylan* (Stoneham, Mass.).

3859. Todd, A. J. The family and character education. (VI). Summary report of section chairman. *Rel. Educ.*, 1929, 24, 448-450.—A list of twelve books is recommended at the end of this summary.—*J. P. Hylan* (Stoneham, Mass.).

3860. Trout, D. M. The college and character education. (II). Factors which contribute to the development of character, as discovered by a dean of men. *Rel. Educ.*, 1929, 24, 454-455.—*J. P. Hylan* (Stoneham, Mass.).

3861. Trout, D. M. The college and character education. (VIII). Administrative control of the character shaping factors in the college community. *Rel. Educ.*, 1929, 24, 461-462.—*J. P. Hylan* (Stoneham, Mass.).

3862. Trumbull, F. M. Guidance and education of prospective junior wage earners. New York: Wiley, 1929. Pp. xii + 298. \$3.00.—The author, who is vocational director at Rockford, Illinois, has made a survey of the junior wage earners in that city. First he has considered those between 14 and 16 who are legally allowed to obtain working permits, with the consent of their parents, to attend the continuation school for eight hours per week and work the rest of the time. Next he has considered the wage earners between 16 and 21 years of age. An investigation was made into such questions as home background, details of employment, previous schooling, job requirements, and plans for the future. Something of the technique of educational and vocational guidance is given, with an appendix of sample forms of information blanks. The evolution of the school counselor with his various duties and of the new curriculum to meet the demands for vocational education is traced. A description is given of the three types of coöperative training and supervised employment; viz., the continuation school, apprenticeship, and half-time coöperative education. Finally, the problems of junior placement service are presented.—*M. B. Mitchell* (Boston State Hospital).

3863. van Det, E. J. De persoonlijkheid van het kind in verband met beroeps en schoolkeuze. (The personality of the child in relation to the choice of school and vocation.) *Jeugd en Beroep*, 1928, 1, 103-112.—Arguments are presented to show that the choice of a school or vocation has been made too much on an intellectual and advancement basis; the personality of the child has been neglected. The instructor has opportunity to form a much clearer

judgment of the whole child and to give advice on this basis. Parents should be more willing to heed the suggestions of the teachers of their children in the choice of school and vocation. Introduction of practical subjects in the primary school affords opportunity for the fuller development of the child's latent capacities.—*E. Winter* (Holland, Mich.).

3864. van Det, E. J. Vervroegde oogst: gewas en misgewas. (Recent laws affecting education.) *Jeugd en Beroep*, 1928, 1, 126-129.—The author commends the enactment of a law requiring seven years of schooling. The seventh year should not be used to fit children for any particular vocation, but only to make it possible for a larger number of children to make a choice of vocation. There have been changes in the laws concerning the number of pupils per teacher. Formerly 48 pupils were allowed to a single teacher; now when the number of pupils per teacher is over 32, an additional teacher must be employed. The author regrets the passing of a law which recognizes apprenticeship to a trade as attendance at school. This will create a tendency for children of the laboring classes to work before they should; he also regrets the re-enactment of the law requiring entrance examinations for the higher schools. A satisfactory solution has not been found, but the author does not believe that it lies in the direction of entrance examinations. His argument is that all efforts in the lower schools will be given to promotion with detrimental results.—*E. Winter* (Holland, Mich.).

3865. van Det, E. J. Amerika, de bakermat der voorlichting bij beroepskeuze. (America, the cradle of vocational guidance.) *Jeugd en Beroep*, 1928, 1, 135-139.—Wherein the author (1) traces the genesis and early development of organized vocational guidance under Frank Parsons in Boston, (2) points out in considerable detail that the 20 years of its operation have brought no change in its purpose, but decidedly in its method and development, (3) notes and explains its close association with the public school system, (4) compares it with similar institutions in other countries, but speaks in praise of the greater sympathy which it enjoys in America from the public school system and the government.—*H. Hospers* (Western Theological Seminary).

3866. Voogd, P. Een interessant onderzoek. II. Beroepsneiging en beroepskeuze bij de keuze van een beroep. (An interesting investigation. II. Vocational inclination and choice of the apprentice.) *Jeugd en Beroep*, 1928, 1, 152-155.—Vocational inclination of school-children is the pre-history of their vocational choice. The agreement of inclination and choice is here of great importance. Lau's report dealing with such essays of apprentices as furnished material for his views is here discussed.—*H. Hospers* (Western Theological Seminary).

3867. Washburne, J. N. The use of questions in social science material. *J. Educ. Psychol.*, 1929, 20, 321-359.—The influence of variously placed questions of different kinds upon the understanding and recall of facts and the making of generalizations from the material of a 3,000-word historical account

is studied with large equated groups of children. The presence of questions aids both understanding and recall. The grouping of all questions at the beginning of the story is the best placement. It yields a gain in the parts covered by the questions and no loss in the remainder. This gain is attributed to the set established by the questions. The placement of questions at the beginning or at the end of appropriate paragraphs uniformly assists understanding, but results in a loss in the recall of facts not covered by the questions proportional to the gain in the recall of facts covered by the questions. The grouping of questions at the end of the story is the worst placement of all. Girls are the more affected by preview questions, and boys by review questions. Differences in the placement of questions affect children with high EQ's more than those with low EQ's. Preview questions calling for generalizations result in improvement in generalizing which spreads to facts not covered by the questions.—*J. A. McGeoch (Arkansas)*.

3868. **Watson, G. B., & Biddle, D. H.** *A year of research—1927*. Chicago: Religious Education Association, 1929. (Monog. No. 4.) Pp. 82.—The outstanding results of investigations made during 1927 which are of significance to the programs of religious, educational and social agencies, are summarized under 24 topical headings. No attempt is made to summarize every experiment. The authors have selected only those results which are absolutely new. The second section of the monograph is devoted to an annotated bibliography of 506 titles which gives the results of each piece of research.—*H. S. Clapp (Southboro, Mass.)*.

3869. **West, M.** *Psychology and education*. *Indian J. Psychol.*, 1928, 3, 1-16.—The functions of the schools are: (1) to teach children how to live among others; (2) to teach certain fundamental knowledges and skills; and (3) to afford children the opportunity to develop their own peculiar interests and abilities.—*C. W. Bray (Princeton)*.

3870. **Wilson, M. O.** *What the Chicago doctors of philosophy are doing*. *School & Soc.*, 1929, 29, 815-818.—Of Chicago's 2,055 Ph.D.'s, 68.28% are teaching, and 60.29% are teaching the subjects of their major preparation. Of the 7.99% who are not teaching in the field of their academic major, more have joined education departments than any other. Non-academic work, but closely related to that for which they were trained by the University, has attracted 13.77%. Relatively larger numbers of the graduates in home economics than in any other department have seen fit to occupy themselves with pursuits radically different from what their training would lead one to expect. The mortality rate has been relatively highest, and strikingly so, among the graduates of the department of anatomy.—*H. L. Koch (Texas)*.

3871. **Witmer, H. L.** *The attitudes of mothers toward sex education*. Minneapolis: Univ. of Minnesota Press, 1929. Pp. v + 112. \$1.00.—The Women's Cooperative Alliance of Minneapolis has been engaged for ten years in a program of parental education in social hygiene. Field workers make

house to house visits, attempting to aid mothers in sex education of their children and to enroll them in lecture courses on the subject. This report is the preliminary one in a survey aiming to determine the effectiveness of the work. It is interesting chiefly for the method worked out of measuring attitudes by before-and-after objective tests, and also as a record of the opinions of middle-class mothers with respect to the sex education of their children. The tests used are given, and the results presented largely in tabular form.—*M. P. Montgomery (Faribault, Minn.)*.

3872. **Wittler, M.** *Factors affecting ability in handwriting*. *School & Soc.*, 1929, 29, 847-850.—440 children in grades III to VI were divided into age and sex groups. For each group correlations were computed between the anatomic indexes of the children and the quality and rate of their handwriting, as well as between the latter two traits and IQ's. Anatomic age, it is concluded, appears irrelevant as a determiner of either rate or quality of penmanship. Superior mental ability is a more important correlate. The correlation coefficients between the measures of brightness and the measures of handwriting used ranged from .21 to .74, the *r*'s being generally higher in the case of the groups of girls than boys, and in the case of rate than quality. Individual case studies suggest that manual aptitude and motivation influence penmanship materially. The *r*'s between speed and quality of handwriting ranged from .07 to .58.—*H. L. Koch (Texas)*.

3873. **Yepsen, L. N.** *The reliability of self-scored measures*. *School & Soc.*, 1929, 29, 681-682.—Of 59 high school and college students given the opportunity of scoring their own performance on the Ohio State Literacy Test, 34% altered their work in order to make their performance appear superior to what it really was. Cheating of this sort was about twice as frequent among those individuals rating above the median on a test of intelligence as among those rating below the median.—*H. L. Koch (Texas)*.

[See also abstracts 3474, 3488, 3497, 3516, 3565, 3629, 3638, 3664, 3675, 3704, 3706, 3712, 3744.]

## BIOMETRY AND STATISTICS

3874. **Brandt, A. E.** *Use of machine factoring in multiple correlation*. *J. Amer. Statis. Asso.*, 1928, 59, 291-295.—A system of using the tabulating machine to aid in the computation of statistical constants, such as  $\Sigma X$ ,  $\Sigma X^2$ ,  $\Sigma XY$ , for use in solving correlations is described. The method makes possible the use of the original observations, eliminating grouping of scores. Machine factoring is used commercially under the name of digitizing.—(Courtesy *Social Science Abstracts*).

3875. **Goodenough, F. L.** *A short method for computing the correlation between interchangeable variables*. *J. Educ. Psychol.*, 1929, 20, 386.—A method, still shorter than an earlier described method by Furfey, is given for correlating interchangeable variables without the construction of a scatter-diagram.—*J. A. McGeoch (Arkansas)*.

3876. Jensen, A. Purposive selection. *J. Royal Stat. Soc.*, 1928, 91, 541-547.—Bowley has shown that a mathematical measure of precision can be given when use is made of the method of "purposive selection" and that ordinarily precision is not greatly increased by the use of controls. But even limited improvements are important to the practical statistician, and Bowley's argument is limited to the problem where samples are employed to find the "value of a single average or proportion in the universe." Where samples are to be employed for extensive analysis, it is advisable to use controls, for the greater the number of controls included, the nearer does one approach the ideal sample which in all respects gives an exact reflection of the universe.—(Courtesy *Social Science Abstracts*).

3877. Kurtz, A. K. A special case of the multiple correlation coefficient. *J. Educ. Psychol.*, 1929, 20, 378-385.—A formula is derived whereby, given  $n$  variables and intercorrelations of a known or assumed range, the limiting values of the possible multiple correlations may be obtained.—*J. A. McGeoch* (Arkansas).

3878. Lenz, F. Antwort auf Weinbergs neueste Polemik. (Reply to Weinberg's latest polemic.) *Arch. Rassen- u. Gesellschafts-Biol.*, 1926, 18, 89-92.—A reply to Weinberg's criticisms in von Gottstein, Schlossmann, and Teleky's *Handbuch der Sozialen Hygiene* and in *Arch. Rassen- u. Gesellschafts-Biol.*, 1926, 18, 85-89. A statistical constant, being itself a definition, need not be derived from some more fundamental concept. Weinberg's calculations of mean deviation and standard deviation are considered wrong.—(Courtesy *Biological Abstracts*).

3879. Neyman, J., & Pearson, E. S. On the use and interpretation of certain test criteria for purposes of statistical inference. Part II. *Biometrika*, 1928, 20A, 263-294.—R. A. Fisher's concept of likelihood is extended in this paper by defining the likelihood of the simple hypothesis that a sample,  $\Sigma$ , had been drawn from a population,  $\pi$ , as  $\lambda = C/C(\Omega_{\max})$ , where  $C$  is the chance of obtaining  $\Sigma$  from  $\pi$ , and  $C(\Omega_{\max})$  is the maximum chance of obtaining  $\Sigma$  from any population in the set  $\Omega$ . The likelihood of the composite hypothesis that  $\Sigma$  has been drawn from one of the populations of the sub-set  $\omega$  is defined as  $\lambda_1 = C(\omega_{\max})/C(\Omega_{\max})$ . This leads to the  $\chi^2$  test of goodness of fit. In testing a function fitted to a sample we may ask two questions: (1) How probable is it that the observed sample would have been drawn from a specified population whose group proportions are actually those of the fitted function? In this case  $n' = k$ , the number of classes. (2) How probable is it that the sample would have been drawn from some one of the sub-set of populations whose law of frequency is given by the functional form? In this case  $n' = k - c$  where  $c$  is the number of parameters. The correlation of  $\chi^2$ , the measure of deviation from the sampled population, with  $\chi_1^2$ , the measure of deviation from the fitted function, is derived, and confirmed by a sampling experiment.—(Courtesy *Social Science Abstracts*).

3880. Pearse, G. E. On corrections for the moment-coefficients of frequency distributions when there are infinite ordinates at one or both of the terminals of the range. *Biometrika*, 1928, 20A, 314-355.—In Pairman and Pearson's corrections a better result may be obtained by determining  $q$  from the observed data instead of giving it the mean value  $1/2$ . Formulae for doing this are derived and auxiliary tables given.—(Courtesy *Social Science Abstracts*).

3881. Pearson, E. S., & Adyanthaya, N. K. The distribution of frequency constants in small samples from symmetrical populations. (Preliminary notice.) *Biometrika*, 1928, 20A, 356-360.—Discusses the distribution of range, center, and median.—(Courtesy *Social Science Abstracts*).

3882. Pearson, K. The contribution of Giovanni Plana to the normal bivariate frequency surface. *Biometrika*, 1928, 20A, 295-298.—A note on Helen M. Walker's "The relation of Plana and Bravais to the theory of correlation" (*Isis*, 1928, 10, 466-484). Plana had "the idea of making two variates inter-related by supposing them linear functions of the same variates," but no single symbol of his notation is equivalent to the coefficient of correlation.—(Courtesy *Social Science Abstracts*).

3883. P[earson], K., & E[lderton], E. M. Appendix. On the correlation of two first order correlation coefficients. *Biometrika*, 1928, 20A, 310-313.—An appendix to Horace Gray's "The relation of weight to stature, bi-cristal diameter and age" (*Biometrika*, 1928, 20A, 299-309.) Weight is best predicted from stature and bi-cristal diameter, next best from stature and age, third best from bi-cristal and age; but all 3 differ  $< 1\%$  in their probable errors. There is no gain in using all 3 variables. "The clinicians who are seeking the 'normal weight' of an individual are, we believe, following a Will o' the Wisp. They cannot get rid of wide variabilities by any prediction formula."—(Courtesy *Social Science Abstracts*).

3884. Rhodes, E. C. On the normal correlation function as an approximation for the distribution of paired drawings. *J. Royal Stat. Soc.*, 1928, 91, 548-550.—Just as the equation to the normal probability curve is an approximation to the probability of a given number of successes when one event is involved, under certain conditions, so the normal correlation function is here derived as an approximation to the probability of given numbers of successes when two events are involved, under certain other conditions.—(Courtesy *Social Science Abstracts*).

3885. Rider, P. R. Moments of moments. *Proc. Nat. Acad. Sci.*, 1929, 15, 430-434.—The first four moments of the distribution of second moments for samples of  $n$  from an infinite population are here derived by transformations of known formulae for the semi-invariants of the distributions of semi-invariants of samples. These four formulae have been previously derived by other methods. By the use of transformations of semi-invariant formulae or by "Student's" method, Rider derives formulae for the first two moments of  $\mu_2$  and  $\mu_4$ , and for the first mo-

ments of  $\mu_n$ ,  $\mu_{n-1}$ ,  $\mu_{n-2}$ , and  $\mu_{n-3}$ . Formulae are given, without derivation for the fourth moment of  $\mu_n$  and for  $\beta_3$  of  $\mu_n$ . A table shows that  $\beta_3(\mu_n)$  takes the value 4.8 when  $n$  is 50 and the value 3.9 when  $n$  is 100, although it is 3.0 when  $n$  is infinite.—A. K. Kurtz (Ohio State).

3886. Rietz, H. L. On certain properties of frequency distributions of the powers and roots of the variates of a given distribution. *Proc. Nat. Acad. Sci.*, 1927, 13, 817-820.—With many common types of distributions, if a variate  $x^n$  is used instead of  $x$ , the mode of the transformed distribution is greater than the  $n^{\text{th}}$  power of the mode of the original distribution when  $n$  lies within the interval 0 to 1; the mode of the new distribution is less than the  $n^{\text{th}}$  power of the mode of the original distribution when  $n$  is outside this interval. If a variate  $x^a$  is used instead of  $x$  in a symmetrical distribution, the mode is greater than the median and the median is greater than the mean when  $n$  lies within the interval 0 to 1; when  $n$  is outside this interval, the mean is greater than the median and the median is greater than the mode.—A. K. Kurtz (Ohio State).

3887. "Sophister." Discussion of small samples drawn from an infinite skew population. *Biometrika*, 1928, 20A, 389-423.—For samples of 5 and 20 the distributions of means are nearly normal; the distributions of variances follow Type VI Pearson curves. For samples of 5 but not of 20 the distribution of ranges is close to that from a normal population. "Student's"  $t$  follows a Type IV distribution, differing markedly from that from a normal population. The correlation coefficients of mean with variance and standard deviation are about 0.4, instead of 0, the value for a normal population.—(Courtesy *Social Science Abstracts*).

3888. Tryon, R. C. Errors of sampling and of measurement as affecting difference between means. *J. Comp. Psychol.*, 1929, 9, 191-195.—The author's formula for the standard deviation of the difference between the means of two distributions of true scores (free from errors of measurement but not from errors of sampling) is shown to be complementary to Huffaker's formula for the standard deviation of the difference between the means occasioned solely by the errors of measurement. The two formulae, when added together, give a sum which is identical with the orthodox and older formula employed to compute the fallible standard deviation of a difference between means of uncorrelated distributions of fallible scores. Hence, his earlier position, as regards a difference becoming all the more significant in proportion to the unreliability of the instrument of measurement, now becomes somewhat as follows: that part of the  $\sigma$  difference due to the error of sampling becomes smaller as the error of measurement becomes larger (i.e., when the reliabilities decrease); and, conversely, if the error of sampling is constant, the greater the error of measurement (i.e., the greater the unreliability), the greater the  $\sigma$  of the difference; hence, the found difference will become less and less significant with greater and greater unreliability of measurement.—H. R. Crosland (Oregon).

3889. Watson, G. B. [No title.] *J. Educ. Res.*, 1928, 18, 178-179.—A method of determining the number of judges adequate for scale construction is presented. "It is indicated that the common practice of interpreting a scale unit in terms of 75 per cent of the judges believing A superior to B should not be based upon the choices of less than 28 judges."—N. L. Munn (Clark).

3890. Whitney, F. L. Statistics for beginners in education. New York: Appleton, 1929. Pp. 123. \$1.50.—The book is an elementary presentation and explanation of 62 terms commonly used in educational statistics. It attempts to state simply and illustrate clearly from the field of education the meaning of these statistical terms. 22 tables and 19 figures are included.—L. W. Gellermann (Clark).

3891. Williams, J. H. Elementary statistics. New York: Heath, 1929. Pp. xvi + 220. \$2.00.—This book contains simple explanatory definitions of the fundamental statistical processes. It contains fully worked out and analyzed problems, practice problems of each type, answers to problems, explanatory charts, and suggestions for short cuts in time saving. The book is divided into five main parts, *The Statistical Arrangement of Numbers, Measures of Central Tendency, Measures of Variability or Deviation, Measures of Relationship or Correlation, and Graphic Methods*.—P. H. Ewert (Vermont).

3892. Wilson, E. B. On hierarchical correlation systems. *Proc. Nat. Acad. Sci.*, 1928, 14, 283-291.—The thesis is presented, with mathematical demonstration and illustration, that  $g$  is, in general, largely indeterminate; that "if we . . . start upon a system of weighting which leads to new scores we can, while keeping to hierarchical systems, do pretty much what we want with  $g$ ; . . . that if a system be not hierarchical, . . . one may by linear combinations reassemble the original scores in such a way as to form a hierarchical system; but the particular manner, of the infinitely many possible, in which this is done will of itself do much to determine not only the independent special qualities but the resulting vector  $g$ ." The psychologist is mathematically free to "take any weighted scores to represent the general intelligence"; he may, therefore, "concentrate his attention . . . on the question . . . as to what combination for any particular set of tests should be taken as representing the intelligence, and in how far he desires to leave the intelligence still undetermined."—H. S. Conrad (California).

3893. Wishart, J. Note on the paper by Dr. J. Wishart in the present volume (XXA). *Biometrika*, 1928, 20A, 424.—Explains the meaning of the moment coefficients derived in the paper.—(Courtesy *Social Science Abstracts*).

3894. Wyss, H. Über die Berechnung von Durchschnittswerten. (The computation of averages.) *Zsch. f. schweizerische Stat. u. Volkswirtschaft.*, 1928, 64, 370-386.—The author devotes his paper to the algebraic expression of formulas for mean ordinates and abscissas. He uses time series and frequency distributions for his purposes. The mean ordinate or

abscissa is obtained in his illustrations by dividing into the area representing the two dimensions in his data the greatest abscissa or ordinate. The author conceives the irregular areas as being equivalent to rectangles having the greatest abscissa or ordinate as sides. The algebraic expression of these areas and the quotients considered as averages are given detailed attention.—(Courtesy *Social Science Abstracts*).

[See also abstracts 3451, 3900.]

#### MENTAL TESTS

3895. Atkinson, W. R. The relation of intelligence and of mechanical speeds to the various stages of learning. *J. Exper. Psychol.*, 1929, 12, 89-112.—The writer's problem was to find out how well intelligence tests measure the achievement of learners as they advance through successive practices toward the limits of ability in several learning tasks and to see what relationship mechanical speed bears to the achievement in each of the learning tests. The tasks to be learned consisted of card sorting, number-code substitution, number alphabet, and the like. Mechanical speed is defined as "the rate at which an organism functions in any activity wherein the native and previously acquired responses are given free play and wherein a minimum of unlearned activity is required." Results of the learning tests were compared with Army Alpha and the Columbia intelligence tests, and the writer concludes that the intelligence tests are not identical with learning ability and that the tests are likely to excel tests for mechanical speed in predicting how well a subject enters upon a new task, but do not predict the limits of ability of the learner as well as do tests of mechanical speed.—S. Renshaw (Ohio State).

3896. Ball, R. J. An objective measure of emotional instability. *J. Appl. Psychol.*, 1929, 13, 226-256.—A comparison of the performances of ten psychopathic boys with those of ten normals (boys of both groups being selected from among 100 delinquents) on a high relief finger maze showed "that the use of the finger maze is advantageous in the study of differences in stability between individuals because it practically shuts out of the situation the factors of IQ, visual sensations, auditory sensations, and a great amount of reasoning due to the almost entirely trial and error methods necessary at the start, leaving irregularities of performance due to false moves, etc., at the mercy of emotional reactions during the learning process." Normal, stable individuals differ from unstable individuals in the extent to which they allow obstructions, new experiences, etc., to influence their learning processes. According to the author, "there is practically no correlation between the learning of the finger maze and the intellectual capacity of the learner," while he also states that "adults and older children learn the maze more rapidly, in fewer number of trials and with less errors than do younger children." The average IQ's of the two groups differ by but approximately 7 points, although the normal group includes only two cases (IQ 56 and 68) below an IQ of 100, while the psychopathic group contains only one case (IQ 123)

above 104 in IQ. No tabulations of mental ages are given. Bibliography of 25 titles.—G. L. Barclay (Nebraska).

3897. Boltunov, A. P. [Measurements of intelligence in school children.] (2d ed.) Leningrad: Seyatel, 1929. Pp. 112.—This monograph follows the orthodox lines of Terman's measurements of intelligence. The material has been collected by the psychological laboratory of the Gertzen Pedagogical Institute in Leningrad. The tests were given by the author and his staff to 5,424 children in the primary and secondary schools of the Leningrad and Vibog counties. In the introductory chapters the author emphasizes the fact that the Binet-Simon tests, although excellent in themselves, are not practical, as they require too much time for testing and are not suitable to the local conditions in Russia. Tests which require written instructions are also not applicable, because unfair advantage is gained by some children who can read faster than others. The author comes to the conclusion that tests with oral directions are best suited for classroom purposes. The author feels that the main requirement in tests is simplicity, so that the children have no difficulty in understanding them. Definite and explicit directions are outlined in detail. The tests are subdivided into 18 groups, with 5 tests in each group. To determine the IQ the chronological age of 16 for adults is used. The tests follow the usual method adopted by Binet-Simon, with author's moderations and inclusion of some simple tests devised by Russian psychologists, especially those of Rossolimo. The tests for the ages of 17 and 18 are of a new type, and require a greater degree of abstract reasoning and judgment than most of the corresponding tests in American practice; requiring a great deal of comparison by analogy, understanding of symbolic expressions, and fairly advanced appreciation of theory of mathematical series. The tests are printed all on one side of the page so that they can be cut out and pasted on cardboards for use in classrooms. The author warns the tester not to consider this test as absolute, and in determining the final IQ recommends taking into consideration the school record of the child as well as the environmental factors. 30 pages of tables and illustrations.—J. Kasanin (Boston Psychopathic Hospital).

3898. Burgard, J. Testreihe zur Untersuchung der Allgemeinintelligenz Erwachsener. (Test series on the investigation of adult general intelligence.) *Arch. f. d. ges. Psychol.*, 1929, 68, 325-394.—The series consists of such tests as grouping opposites, following directions, finding hieroglyphics, solving puzzles, and forming figures. The general intelligence as well as special abilities of the adult can be measured by suitable tests. These methods can be applied to all classes of people, both educated and uneducated; nevertheless, the highest rankings in these tests include those of the educated class. Thus, the view of the relation between intelligence and Marbe's conception of personality is supported; intelligence is essentially innate, but is further determined by acquired abilities which rest on the develop-

3901. Kollarits, J. Eine psychiatrische Untersuchungsmethode: Die Erkennung des Differenten. (A psychiatric method of investigation: the recognition of the different.) *Arch. f. Psychiat.*, 1928, 85, 810-814. —Developing Rauschberg's ideas, the author communicates a new method for testing aptitude for investigation. He exposes for 1/3 sec. definite combinations of points or designs, the difficulty of which is graded by increasing the elements, and he asks for a report when it is recognized that an element is missing or that it is replaced by another one. The fundamental forms of his cards are such as:

3904. van Dael, J. De invloed van het sociale milieu op de ontwikkeling der intelligentie. (The influence of social environment on the development of intelligence.) *Mensch en Maatschappij*, 1929, 5, 339-341.—The author reports the result of his experiments with children from every kind of environment in the lower grades of schools in Nijmegen, Netherlands. These were divided into four categories representing descending grades of environment. Four tests were applied: (1) the telegram-test; (2) the chronological order test; (3) the absurdities test; (4) the conjunction-supplement test. Hour of test and data are given. Two tables are appended; Table I gives under each category the number of pupils, average age, and dispersion. Table II summarizes the result of the experiment under each of the four tests applied. The table reveals that test scores improve in proportion to better environment. —H. Hospers (Western Theological Seminary).

3905. Wallin, J. E. W. A statistical study of the individual tests in age VIII and IX in the Stanford-Binet scale. *Ment. Meas. Monog.*, 1929. No. 6. Pp. vii + 58.—The data reported in this monograph were based on the results from testing 1,382 children with the Stanford-Binet scale. The results on the 8- and 9-year sub-tests are analyzed, the testees being classified with regard to both chronological and mental age. The purpose is to discover whether these sub-tests are properly placed as to age level, whether or not they differentiate between normal, sub-normal, and feeble-minded children, and at what age success on these tests may be expected of the two latter groups; sex differences are also considered. The results show no sex differences among any of the diagnostic groups. The 8-year tests discriminate between normal children of 7 and 9, but the 9-year tests, except for the weight and rhyme tests, serve only to discriminate between 8 and 9, showing no marked differences between 9- and 10-year Binet ages except in the reverse digits test. The ball-and-field and vocabulary are too difficult for normal 8-year-old children, while the definition and comprehension questions are too easy. For normal

9-year-old children giving the date, discriminating weights, and reversing digits are properly placed, while the rest are too easy. All the sub-tests at both levels differentiate between normal, sub-normal, and feeble-minded when chronological age is taken as a criterion. Using the Binet test age as a criterion, only the counting backwards and vocabulary tests at the 8-year level fail to discriminate. In the 9-year tests the life experience of the older and duller groups seems to compensate for brightness. One may conclude that the tests of any one age level are not equally difficult for any one "brightness" classification.—D. E. Johannsen (Wellesley).

3906. Wells, F. L. The psychometric factor in medical problems. *Amer. J. Psychiat.*, 1928, 8, 235-249.—The material is presented in chronological sequence: (1) pre-school; (2) school; (3) adolescent; (4) adult. Various tests, suitable for each period, are discussed in connection with such questions as school prognosis, vocational guidance, delinquency, and mental deterioration as a result of disease or shock.—W. M. Rosebrook (Boston Psychopathic Hospital).

[See also abstracts 3496, 3737, 3752, 3766, 3767.]

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